

US EPA RECORDS CENTER



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Monthly Oversight Report 30  
ACS NPL Site  
Griffith, Indiana  
May 31, 2003 - June 27, 2003

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6-27-03



# BLACK & VEATCH

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Black & Veatch Special Projects Corp.

USEPA/RAC VII  
American Chemical Services RAO (057-ROBF-05J7)

BVSPC Project 46526  
BVSPC File C.3  
July 10, 2003

Mr. Kevin Adler  
U.S. Environmental Protection Agency  
77 W. Jackson Boulevard (SR-6J)  
Chicago, Illinois 60604-3590

✓ K.A.  
7/29/03

Subject: Monthly Oversight Summary Report  
No. 30 for June 2003

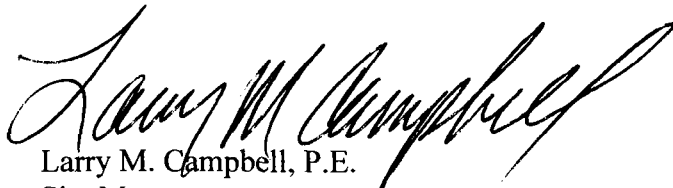
Dear Mr. Adler:

Enclosed is the Monthly Oversight Summary Report No. 30 for June 2003 for the American Chemical Services Superfund Site in Griffith, Indiana.

If you have any questions, please call (312-683-7856) or email ([campbellm@bv.com](mailto:campbellm@bv.com)).

Sincerely,

BLACK & VEATCH Special Projects Corp.

  
Larry M. Campbell, P.E.  
Site Manager

Enclosure

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**Monthly Oversight Summary Report No. 30**  
**ACS Superfund Site WA57, 46526.238**

**Reporting Period:** Month of June (May 31, 2003 - June 27, 2003)

**BVSPC O/S Dates:** June 3, 5, 10, 16, 17, 19 and 26, 2003

Personnel Summary Affiliation	No. of Personnel	Responsibility
Montgomery Watson Harza	5	Respondent's General Contractor
Black & Veatch Special Projects Corp.	1	USEPA Oversight Contractor
Independent Environmental Services	2	ONCA SBPA ISVE System Yard Piping Contractor
Central Crane	1	Crane Contractor
Fliteway	4	ONCA SBPA ISVE System Blower Shed Manufacturer
Austgen	3	Electrical Contractor
Ryan Construction	2	General Contractor
Autumn Industries	1	Granular Activated Carbon Supplier
Carbonair	1	Carbon Distribution Piping Contractor

**Construction Activities**

**Major Activities:**

- Independent Environmental Services completed the concrete pads for the On-Site Containment Area Still Bottoms Pond Area in-situ soil vapor extraction system dual phase extraction wells.
- Montgomery Watson Harza and Central Crane placed the On-Site Containment Area Still Bottoms Pond Area in-situ soil vapor extraction system blower shed building #1 on the concrete slab.
- Fliteway extended the west wall and completed the electrical wiring for the On-Site Containment Area Still Bottoms Pond Area in-situ soil vapor extraction system blower shed building #1.
- Ryan Construction and Austgen connected the On-Site Containment Area Still Bottoms Pond Area in-situ soil vapor extraction system yard piping to the manifold in blower shed building #1.

- Austgen completed hard wiring and installing the motor control center for the On-Site Containment Area Still Bottoms Pond Area in-situ soil vapor extraction system blower sheds.
- Montgomery Watson Harza, Austgen, and Autumn Industries replaced the granular activated carbon in the groundwater treatment plant.
- Carbonair replaced the distribution piping in the granular activated carbon vessels.
- Montgomery Watson Harza measured the water levels in the barrier wall extraction system and perimeter groundwater collection system piezometers in accordance with its Performance Standard Verification Plan.
- Montgomery Watson Harza held weekly construction coordination meetings on June 5, 13, 19, and 26, 2003.

#### **Activities Performed:**

Independent Environmental Services (IES) completed the concrete pads for the perimeter On-Site Containment Area (ONCA) Still Bottoms Pond Area (SBPA) in-situ soil vapor extraction (ISVE) system dual phase extraction wells. Montgomery Watson Harza (MWH) reported that the ONCA cover activities are completed until the geosynthetic clay liner and asphalt are installed later in the year.

MWH and Central Crane lifted the ONCA SBPA ISVE system blower shed building #1 onto the concrete slab. MWH placed the blower shed such that the ISVE yard piping in the concrete slab lined up with the manifold installed in the blower shed building. Austgen removed the base of the western wall to accommodate the piping that connects to the groundwater treatment plant (GWTP) from the blower shed concrete slab. Fliteway mobilized to the site and removed the west wall of the ONCA SBPA ISVE system blower shed building #1 on June 9, 2003. Fliteway installed a 2-foot-long extension to the western portion of the blower shed building #1 to enclose the piping that connects from the shed to the GWTP. Fliteway completed the building extension on June 10, 2003.

Austgen was onsite on June 17, 2003, to begin wiring the ONCA SBPA ISVE system blower shed building #1. Upon inspection of the exterior electrical boxes installed on the west wall of blower shed building #1, Austgen observed that the boxes were not installed to code requirements. Austgen observed that the conduit installed was not level and did not connect to the boxes properly. Austgen also observed that the boxes were installed at an angle against the exterior wall of blower shed building #1. Austgen also reported that the seal for the explosion proof area must be relocated to the west because of the extension installed on the building. Fliteway installed the conduit and boxes last week after extending the western wall of the ONCA SBPA ISVE system blower shed building #1 to accommodate the piping that connects to the GWTP. Fliteway electricians arrived onsite on June 18, 2003, in order to complete the wiring for the extension to the ONCA SBPA ISVE system blower shed building #1. Fliteway replaced the exterior electrical boxes and conduit located on the exterior western wall of the shed in order for the equipment to be in compliance with the code. Fliteway completed its wiring on June 19, 2003, and demobilized from the site.

Ryan Construction and Austgen connected the ONCA SBPA ISVE system yard piping to the manifold in blower shed building #1 during the week of June 2, 2003. The representative from Austgen was 40-hour HAZWOPER trained; however, the Ryan Construction employees were not HAZWOPER trained. MWH



decided that the trained Austgen employee would blow out the yard piping lines prior to Ryan Construction installing the piping to connect the yard piping to the manifold. Austgen continuously monitored the breathing zone with a photoionization detector (PID). Prior to blowing the vapors out of the yard piping lines; Austgen measured the vapors in a few lines with the PID. The PID readings at the yard piping stubs in the blower shed prior to venting were approximately 20 ppm. After Austgen ventilated the lines, the PID readings at the yard piping stubs ranged from 0 to 0.3 ppm.

Ryan Construction began connecting the piping from the GWTP to the manifold and equipment in the ONCA SBPA ISVE system blower shed building #1 during the week of June 23, 2003. MWH reported that it performed air monitoring during piping activities. Ryan Construction was not able to complete connecting the blower to the 8-inch-diameter HDPE piping because it was waiting on a stainless steel vibration-proof coupling. MWH reported that Ryan Construction was unable to connect the effluent piping from the central dual phase extraction wells because it was waiting on several ball valves. MWH reported that Ryan Construction is expected to have the parts and complete installation in early July.

Austgen completed hard wiring and installing the motor control center for the ONCA SBPA ISVE system blower shed buildings on June 27, 2003. MWH reported that it expected to begin system testing in the next reporting period, testing the blower and control systems on fresh air. MWH reported that it anticipated pulling vapors from the ONCA SBPA ISVE well field by July 3, 2003.

MWH reported that it reduced the flow in the GWTP because of high pressure alarms associated with the carbon units. MWH reported that the distribution piping in the units has become clogged, elevating the pressure in the piping. MWH began operating the GWTP during the daytime only at a rate of 10 gpm during the week of June 2, 2003. Autumn Industries and MWH removed the granular activated carbon (GAC) from the carbon vessels on June 17, 2003. Autumn Industries was originally scheduled to remove the GAC on June 16, 2003; however, the carbon truck required repairs and was postponed. During the GAC changeout activities on June 17, 2003; the carbon truck was unable to dewater properly. Autumn Industries dewatered the truck through gravity feed rather than pressurized feed because the screens on the truck were clogged. Carbonair replaced the distribution piping in the lag vessel on June 17, 2003. Because the work was conducted in the confined space of the vessel, MWH ventilated the vessel with fresh air prior to Carbonair's work. MWH also monitored the oxygen level and the lower explosive limit and completed a permit for the work prior to Carbonair entering the confined space. Carbonair donned a Tyvek suit and wore a full-face respirator. Carbonair did not replace the GAC in the lead vessel on June 17, 2003, because removing the GAC from the vessel took the remainder of the afternoon and MWH was not onsite to monitor the confined space work. Carbonair returned to the site on June 18, 2003, and completed its work in the same method as the previous day. MWH resumed operating the GWTP in recirculation mode on June 19, 2003. MWH began discharging treated water on June 21, 2003.

MWH operated the Off-Site Containment Area (OFCA) ISVE system, treating the vapors in Thermal Oxidizer Unit 2. MWH temporarily shut the OFCA ISVE system down in order for Ryan Construction to install a new level transmitter in the condensate knockout tank located in the OFCA ISVE system blower shed. Thermal Oxidizer Unit 2 shut down on June 19, 2003, because of an alarm associated with a stuck pressure switch on the scrubber quench line. MWH disassembled the piping and removed the material that had built up in the lines and attempted to resume operating the unit on Thursday afternoon. MWH reported

that the switch continued to malfunction. MWH continued to operate the OFCA ISVE system, processing vapors in Thermal Oxidizer Unit 1. MWH reported that it received a new pressure switch for the unit on Friday, June 27, 2003, and that it will install the new switch next week and resume operating Thermal Oxidizer Unit 2. MWH also reported that it will meet with its experts this month to evaluate the performance data from the system that has been collected over the past 12 months and will present its findings and recommendations.

MWH measured the water levels in the barrier wall extraction system and perimeter groundwater collection system piezometers in accordance with its Performance Standard Verification Plan on June 18, 2003.

MWH held an internal health and safety meeting on June 12, 2003, to discuss its health and safety plans and the incident when Mr. Stein was exposed to vapors during ISVE system well water level measurements. MWH reported that it would revise its Health and Safety Plan to include water level measurements from the ISVE system wells. MWH also reported that its corporate Health and Safety officer performed an unscheduled inspection of its facility on June 27, 2003. MWH reported that the officer did not find any deficiencies associated with MWH's operations. MWH also reported that it will install placarding on the ONCA SBPA ISVE blower shed buildings requiring the appropriate personal protective equipment for the buildings such as eye and ear protection.

Attached are BVSPC weekly reports No. 118 through 121, correspondence, log book notes, and photographs of the daily activities. BVSPC's crew conducted oversight of the major field activities on June 3, 5, 10, 16, 17, 19, and 26, 2003. BVSPC's crew attended three weekly construction coordination meetings at the site on June 5, 19, and 26, 2003. BVSPC participated in the weekly construction coordination meeting scheduled for June 13, 2003, via conference call because of construction inactivity at the site.

**Topics of Concern:**

- Rudy Stein of MWH became lightheaded after being exposed to vapors during ISVE system well water level measurements.

**Concern Resolution:**

- MWH held an internal health and safety meeting and will amend its site Health and Safety Plan to include water level measurements from ISVE system wells. MWH also reported that it will develop an updated Health and Safety Plan that will include the operations and maintenance work at the site.

**Upcoming Activities:**

- Ryan Construction to complete connecting the mechanical piping in the ONCA SBPA ISVE system blower sheds.
- MWH to begin startup of the ONCA SBPA ISVE system.
- MWH to perform maintenance activities to address erosional damage to the OFCA engineered cover.

Signature: Leigh Peters

Date: July 3, 2003

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**Weekly Oversight Summary Report No. 118**  
**ACS Superfund Site WA57, 46526.238**

**Reporting Period:** Week of June 2, 2003.

**BVSPC O/S Dates:** June 3 and 5, 2003 (Ms. Peters).

Personnel Summary Affiliation	No. of Personnel	Responsibility
Montgomery Watson Harza	3	Respondent's General Contractor
Black & Veatch Special Projects Corp.	1	USEPA Oversight Contractor
Independent Environmental Services	2	ONCA SBPA ISVE System Yard Piping Installation Contractor
Ryan Construction	3	General Contractor
Austgen	1	Electrical Contractor
Central Crane	1	Crane Contractor

**Construction Activities**

**Major Activities:**

- Independent Environmental Services poured concrete pads for the On-Site Containment Area Still Bottoms Pond Area in-situ soil vapor extraction system dual phase extraction wells.
- Montgomery Watson Harza and Central Crane placed the On-Site Containment Area Still Bottoms Pond Area in-situ soil vapor extraction system blower shed building #1 on the concrete slab.
- Ryan Construction and Austgen connected the On-Site Containment Area Still Bottoms Pond Area in-situ soil vapor extraction system yard piping to the manifold in blower shed building #1.
- Montgomery Watson Harza reduced the flow rate of the groundwater treatment plant because of high pressure associated with the distribution piping to the carbon units.
- Montgomery Watson Harza held the weekly construction coordination meeting on June 5, 2003.

**Activities Performed:**

Independent Environmental Services (IES) poured some of the concrete pads for the perimeter On-Site Containment Area (ONCA) Still Bottoms Pond Area (SBPA) in-situ soil vapor extraction (ISVE) system

dual phase extraction wells. IES reported that it will return to the site next week to complete the remaining concrete pads.

Montgomery Watson Harza (MWH) and Central Crane lifted the ONCA SBPA ISVE system blower shed building #1 onto the concrete slab. MWH placed the blower shed such that the ISVE yard piping in the concrete slab lined up with the manifold installed in the blower shed building. Austgen removed the base of the western wall to accommodate the piping that connects to the groundwater treatment plant (GWTP) from the blower shed concrete slab. MWH reported that Fliteway was fabricating an extension to the west wall of blower shed building #1 and that Fliteway would install the extension next week. MWH reported that Austgen will complete installing the motor control center (MCC) and control panel for the ONCA SBPA ISVE system once Fliteway has completed its work. MWH reported that it anticipates starting up the ONCA SBPA ISVE system in approximately 2 weeks.

Ryan Construction and Austgen connected the ONCA SBPA ISVE system yard piping to the manifold in blower shed building #1. The representative from Austgen was 40-hour HAZWOPER trained; however, the Ryan Construction employees were not HAZWOPER trained. MWH decided that the trained Austgen employee would blow out the yard piping lines prior to Ryan Construction installing the piping to connect the yard piping to the manifold. Austgen continuously monitored the breathing zone with a photoionization detector (PID). Prior to blowing the vapors out of the yard piping lines; Austgen measured the vapors in a few lines with the PID. The PID readings at the yard piping stubs in the blower shed prior to venting were approximately 20 ppm. After Austgen ventilated the lines, the PID readings at the yard piping stubs ranged from 0 to 0.3 ppm.

MWH operated the Off-Site Containment Area (OFCA) ISVE system, treating the vapors in Thermal Oxidizer Unit 2. MWH temporarily shut the OFCA ISVE system down in order for Ryan Construction to install a new level transmitter in the condensate knockout tank located in the OFCA ISVE system blower shed. MWH also shut down Thermal Oxidizer Unit 1. MWH reported that it will replace the spray nozzles and reconfigure the piping for Thermal Oxidizer Unit 1.

MWH reported that it reduced the flow in the GWTP because of high pressure alarms associated with the carbon units. MWH reported that the distribution piping in the units has become clogged, elevating the pressure in the piping. MWH began operating the GWTP during the daytime only at a rate of 10 gpm. MWH reported that it has scheduled a carbon change out for June 16, 2003, in order access the distribution piping for replacement. MWH reported that the work will involve a confined space entry and that it will prepare the necessary permits and documentation. MWH also reported that it ordered new respirators for the site.

MWH held the weekly construction coordination meeting on June 5, 2003.

#### **Topics of Concern:**

- Rudy Stein of MWH became lightheaded after being exposed to vapors during ISVE system well water level measurements.

**Concern Resolution:**

- Mr. Stein was cleared for field work. MWH is planning an internal health and safety meeting and will amend its site Health and Safety Plan to include water level measurements from ISVE system wells.

**Upcoming Activities:**

- IES to complete pouring the concrete pads for the ONCA SBPA ISVE system flushmount wells.
- Fliteway to extend the ONCA SBPA ISVE system blower shed building #1.
- MWH to change the carbon in the GWTP and resume operating the GWTP at 20 gpm.
- Austgen to continue installation of the control panel and MCC for the ONCA SBPA ISVE system.
- MWH to perform maintenance activities to address erosional damage to the OFCA engineered cover.

Signature: Leigh Peters

Date: June 12, 2003

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**WEEKLY CONSTRUCTION MEETING MINUTES  
FOR JUNE 5, 2003 MEETING  
AMERICAN CHEMICAL SERVICE, NPL SITE  
GRIFFITH, INDIANA**

**MEETING DATE:** Thursday, June 5, 2003

**MEETING TIME:** 10:00 AM

**MEETING LOCATION:** ACS Site – Site Trailer

**ATTENDEES:** Tom Tinics – MWH  
Rob Adams – MWH  
Leigh Peters – BVSPC  
Pctcr Vagt – MWH (via telephone)  
Todd Lewis – MWH  
Kevin Adler – U.S. EPA  
Jon Pohl – MWH

**TOPICS:**

Health and Safety Summary

No health and safety incidents have occurred at the Site since the last meeting on May 29, 2003. Activities at the site this week included the continued operation of the groundwater treatment plant (GWTP), construction activities associated with the Still Bottoms Pond Area (SBPA) In-situ Soil Vapor Extraction (ISVE) system, and work in the Off-Site ISVE blower shed.

The Thermal Oxidizer Unit 1 (Therm Ox 1) (manufactured by Durr) scrubber pump that caused the caustic leak during the week of May 26<sup>th</sup> was fixed. The caustic that leaked was properly handled.

Groundwater Treatment Plant (GWTP) Status

The GWTP was operating at 20 gallons per minute until June 4<sup>th</sup>. Since then, the flow rate has been decreased to approximately 10 gpm because of fouling in the granular activated carbon (GAC) units and the sand filter. A change out of the GAC and replacement of the distribution piping in the GAC units is scheduled for June 16<sup>th</sup>. The change out and piping replacement is anticipated to take one day to complete. Until this maintenance is completed, the GWTP will be run only during the day. Once the maintenance has been completed, the flow rate will be increased to the normal operating flow rate. Influent water was collected from the Off-Site Barrier Wall Extraction System (BWES), the On-Site BWES extraction trenches, dual phase extraction wells in the SBPA, and the Perimeter Groundwater Collection System (PGCS).

### Off-Site Area ISVE System

Vapors from the Off-Site ISVE system were directed to the new thermal oxidizer (Therm Ox 2) (manufactured by Global) on May 23<sup>rd</sup> as part of the startup testing for the Therm Ox 2. The startup test was run until May 27<sup>th</sup>, at which time the Off-Site ISVE system vapors were directed back to Therm Ox 1. Thermal Oxidizer Unit 1 (Therm Ox 1) was operated to treat vapors from the Off-Site Area ISVE system until June 2<sup>nd</sup>. Therm Ox 1, along with the Off-Site ISVE wells, was taken off line on June 2<sup>nd</sup> to clean the knock-out tank in the Off-Site blower shed and install a new level sensor. The ISVE wells will be brought back on line on June 5<sup>th</sup> and the vapors will be directed to Therm Ox 2. Therm Ox 1 will remain off line so that piping and nozzles in the unit can be reconfigured.

For the past several months MWH has systematically varied the extraction rates of the Off-Site ISVE system. The purpose was to develop data to quantify the factors that influence the mass removal rate of VOCs. The final phase of testing and evaluation has now been completed and MWH is preparing a technical memorandum to document the results and propose the final configuration for the Off-Site ISVE system.

The first phase for the startup of the Global Thermal Oxidizer/Scrubber system (Therm Ox 2) is complete. The unit is operational and has been used to treat process vapor from the Off-Site ISVE wells. The computer controls have not yet been completed so Therm Ox 2 is not yet ready to run in an automatic mode.

### SBPA ISVE System

Blower Shed Building 1 was set in place on June 2<sup>nd</sup> and the building expansion began by removing components of the building's western wall. Fliteway will be on site June 5<sup>th</sup> to continue the building expansion. Fliteway will have a mechanical crew on site June 9<sup>th</sup> to complete the work, which will entail welding. Therefore, the crew and MWH will coordinate with the ACS facility to ensure appropriate health and safety procedures are followed. An electrical crew from Fliteway will be on site on June 11<sup>th</sup> to complete remaining electrical-related tasks.

Austgen Electric continued to wire Building 1 for electrical power. It is anticipated that the blower sheds will be completely powered and capable of pulling vapors in the next two weeks.

On May 29<sup>th</sup>, during the weekly construction meeting, MWH indicated that the connection of the SBPA vapor pipe stubs to the header system in the SBPA blower shed would take place the week of June 9<sup>th</sup>. It was also mentioned that there were health and safety concerns associated with this work due to potential for vapors accumulated in the pipes to be released when the pipes were opened to be connected to the manifold. Therefore, on May 30<sup>th</sup>, Tom Tinics and Chris Daly of MWH developed a procedure to eliminate any potentially harmful or dangerous level of vapors prior to having the subcontractor crew connect the piping and manifold. The following procedure was developed and followed:

1. The caps on all of the SBPA ISVE wells were removed on Friday May 30<sup>th</sup> to allow the pipes to vent over the weekend and equilibrate with the ambient air.
2. Prior to beginning the actual connection work, the pipe stubs were opened one by one. After each pipe stub was opened, a power ventilator was used to blow any remaining vapors back to the well head. Once this was done, the pipe stub was monitored using a photoionization detector (PID).
3. The blower shed building was vented with a portable vent fan during all work activities and MWH personnel, with 40 hour OSHA HAZWOPER certification, was present during the work, monitoring the area with a PID.

Ryan Construction was selected to perform the work because they had done the same type of work for the Off-Site ISVE system. Ryan began work opening the ISVE piping stubs and connecting the pipes to the blower shed's header system on June 3<sup>rd</sup> and will complete the work on June 5<sup>th</sup>. Prior to beginning the work, a meeting was held with the Ryan crew to inform them of the health and safety procedures that would be entailed with this work. Monitoring with the PID did not show the presence of unacceptable vapor concentrations at any time during the work.

Independent Environmental Services (IES) was on site June 4 to complete four of the remaining fourteen concrete manways around the flush-mount wells in the SBPA. IES anticipates the remaining ten manways will be completed by June 10.

#### Off-Site Area Cover

Environmental Contractors of Illinois (ECI) was on site on May 30 to re-survey the Off-Site Cover as a quality control check and to resolve some anomalies from the first survey for the construction completion documentation.

#### Looking Ahead

Week of June 9, 2003	<ul style="list-style-type: none"> <li>• GWTP/BWES/PGCS operation</li> <li>• Off-Site ISVE operation</li> <li>• Expanding SBPA Blower Shed Building 1</li> <li>• Install electrical and control connections in the SBPA Blower Sheds</li> <li>• Complete pouring the remaining concrete manways around the SBPA ISVE wells</li> </ul>
Week of June 16, 2003	<ul style="list-style-type: none"> <li>• GWTP/BWES/PGCS operation</li> <li>• Off-Site ISVE operation</li> <li>• Connect electrical and control lines between SBPA Blower Shed buildings</li> <li>• Change out GAC and perform maintenance on the GAC vessels</li> </ul>



<b>Health and Safety Items to Monitor</b>	<u>Items include:</u> <ul style="list-style-type: none"><li>• MWH will have a H&amp;S meeting on June 12 with pertinent personnel to identify root causes of Tth May 7th incident and evaluate the need to revise H&amp;S procedures</li><li>• Fliteway welding work</li><li>• Completion of electrical work in the SBPA Blower Shed</li></ul>
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Next Weekly Construction Meeting - Friday, June 13, 2003, 10 a.m.

JDP/RAA/PJV

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**Weekly Oversight Summary Report No. 119**  
**ACS Superfund Site WA57, 46526.238**

**Reporting Period:** Week of June 9, 2003.

**BVSPC O/S Dates:** June 10, 2003 (Ms. Peters).

Personnel Summary Affiliation	No. of Personnel	Responsibility
Montgomery Watson Harza	2	Respondent's General Contractor
Black & Veatch Special Projects Corp.	1	USEPA Oversight Contractor
Independent Environmental Services	2	ONCA SBPA ISVE System Yard Piping Installation Contractor
Austgen	1	Electrical Contractor
Fliteway	4	ONCA SBPA ISVE System Blower Shed Manufacturer

**Construction Activities**

**Major Activities:**

- Independent Environmental Services completed the concrete pads for the flushmount On-Site Containment Area Still Bottoms Pond Area in-situ soil vapor extraction system wells.
- Fliteway extended the west wall of the On-Site Containment Area Still Bottoms Pond Area in-situ soil vapor extraction system blower shed building #1.
- Montgomery Watson Harza held the weekly construction coordination meeting on June 13, 2003.

**Activities Performed:**

Independent Environmental Services (IES) completed the concrete pads for the perimeter On-Site Containment Area (ONCA) Still Bottoms Pond Area (SBPA) in-situ soil vapor extraction (ISVE) system dual phase extraction wells. Montgomery Watson Harza (MWH) reported that the ONCA cover activities are completed until the geosynthetic clay liner and asphalt are installed later in the year.

Fliteway mobilized to the site and removed the west wall of the ONCA SBPA ISVE system blower shed building #1 on June 9, 2003. Fliteway installed a 2-foot-long extension to the western portion of the blower shed building #1 to enclose the piping that connects from the shed to the groundwater treatment plant (GWTP). Fliteway completed the building extension on June 10, 2003. MWH reported that electricians from Fliteway will be onsite on June 16, 2003, to complete the electrical wiring. Once that has been complete, Austgen will finish installing the motor control center (MCC).

MWH operated the Off-Site Containment Area (OFCA) ISVE system, treating the vapors in Thermal Oxidizer Unit 2. MWH reported that it was operating a set of 17 wells that are spatially distributed to influence both the OFCA and the Kapica-Pazmey well fields. MWH also reported that it will meet with its experts this month to evaluate the performance data from the system that has been collected over the past 12 months and will present its findings and recommendations.

MWH continued to operate the GWTP at 15 gpm. MWH reported that it has scheduled a carbon change out for June 16, 2003, in order access the distribution piping for replacement. MWH reported that the work will involve a confined space entry and that it will prepare the necessary permits and documentation.

MWH held an internal health and safety meeting on June 12, 2003, to discuss its health and safety plans and the incident when Mr. Stein was exposed to vapors during ISVE system well water level measurements.

MWH held the weekly construction coordination meeting on June 13, 2003. Black & Veatch Special Projects Corp. participated in the weekly construction coordination meeting via conference call because of the construction inactivity at the site.

**Topics of Concern:**

- Rudy Stein of MWH became lightheaded after being exposed to vapors during ISVE system well water level measurements.

**Concern Resolution:**

- MWH held an internal health and safety meeting and will amend its site Health and Safety Plan to include water level measurements from ISVE system wells. MWH also reported that it will develop an updated Health and Safety Plan that will include the operations and maintenance work at the site.

**Upcoming Activities:**

- Fliteway to rewire the west wall of the ONCA SBPA ISVE system blower shed building #1.
- MWH to change the carbon in the GWTP and resume operating the GWTP at 20 gpm.
- Austgen to continue installation of the control panel and MCC for the ONCA SBPA ISVE system.
- MWH to perform maintenance activities to address erosional damage to the OFCA engineered cover.

Signature: Leigh Peters

Date: June 12, 2003

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**WEEKLY CONSTRUCTION MEETING MINUTES  
FOR JUNE 13, 2003 MEETING  
AMERICAN CHEMICAL SERVICE, NPL SITE  
GRIFFITH, INDIANA**

**MEETING DATE:** Friday, June 13, 2003

**MEETING TIME:** 10:00 AM

**MEETING LOCATION:** ACS Site – Site Trailer

**ATTENDEES:** Peter Vagt – MWH (via telephone)  
Lee Orosz – MWH  
Leigh Peters – BVSPC (via telephone)  
Kevin Adler – U.S. EPA (via telephone)  
Chris Daly – MWH (via telephone)  
Jon Pohl – MWH (via telephone)

**TOPICS:**

**Health and Safety Summary**

No health and safety incidents have occurred at the Site since the last meeting on June 5, 2003. Activities ongoing at the site this week included the continued operation of the groundwater treatment plant (GWTP) and construction activities associated with the Still Bottoms Pond Area (SBPA) In-situ Soil Vapor Extraction (ISVE) system.

On Thursday June 12<sup>th</sup>, MWH conducted a meeting at the Warrenville, Illinois office to review and evaluate current health and safety practices and procedures for the project and at the Site.

**Groundwater Treatment Plant (GWTP) Status**

The GWTP is operating at approximately 15 gallons per minute. This decreased flowrate is due to fouling in the granular activated carbon (GAC) units. Carbonair will be on site on June 16<sup>th</sup> to change out the carbon and to replace distribution piping in the GAC units. The replacement of the distribution piping, which will be completed by a technician from Carbonair, is a confined space entry. MWH has a confined space entry permit ready for the activities and will perform monitoring during the work activities.

After the GAC change out and pipe replacement has been completed, the GWTP will be started up in recirculation mode. When the pH has stabilized near neutral conditions, typically after two or three days, the treatment plant will be brought back on line to treat water from the BWES and PGCS.

**SBPA ISVE System**

The Global Thermal Oxidizer/Scrubber system (Therm Ox 2) is currently online treating vapors from the Off-Site ISVE system. There have been no issues with the unit since the last meeting. Seventeen SVE wells are currently online. These wells are being monitored on a daily frequency during the week of June 9<sup>th</sup> and will go to weekly monitoring for a period of three weeks starting the week of June 16<sup>th</sup>. The wells will be monitored monthly after this three week period. The initial testing of Therm Ox 2 began on June 13<sup>th</sup> and will continue with weekly sampling eight weeks. In accordance with the conference between MWH and Global, Global performed tests on Therm Ox 2 to document its destruction efficiency during the initial startup. The results of these tests are not yet available.

MWH is currently compiling an evaluation of the first year of operation of the Off-Site ISVE System and the optimization testing. We have scheduled meeting with several other MWH professionals with experience and expertise in ISVE Systems to review our findings and assist in planning the enhancements for the Off-Site ISVE system. The conclusions will be summarized and reported by the end of July.

Fliteway has completed the expansion of the SBPA Blower Shed Building 1. An electrical crew from Fliteway will be on site on June 16<sup>th</sup> to complete remaining electrical-related tasks. Once Fliteway has completed it's component of the electrical work, Austgen Electric will complete the electrical and control wiring in the blower shed.

Ryan Construction will also complete connections of the header piping in the blower shed. MWH will perform air monitoring prior to and during this work. It is anticipated that the blower sheds will be completely powered and capable of pulling vapors in the next two weeks.

Independent Environmental Services (IES) completed the remaining concrete manways around the flush-mount wells in the SBPA on June 13<sup>th</sup>.

**Looking Ahead**

Week of June 16, 2003	<ul style="list-style-type: none"> <li>• GWTP/BWES/PGCS operation</li> <li>• Off-Site ISVE operation</li> <li>• Install electrical and control connections in the SBPA Blower Shed</li> <li>• Change out of GAC Unit carbon and piping</li> <li>• Complete pipe connections in the SBPA Blower Shed</li> </ul>
Week of June 23, 2003	<ul style="list-style-type: none"> <li>• GWTP/BWES/PGCS operation</li> <li>• Off-Site ISVE operation</li> </ul>
Health and Safety Items to Monitor	<u>Items include:</u> <ul style="list-style-type: none"> <li>• Completion of electrical work in the SBPA Blower Shed</li> </ul>

	<ul style="list-style-type: none"><li>• Completion of pipe connections in the SBPA Blower Shed</li><li>• Confined space entry for replacement of GAC unit piping</li></ul>
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Next Weekly Construction Meeting - Thursday, June 19, 2003, 10 a.m. CDT

JDP/PJV/RAA

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**Weekly Oversight Summary Report No. 120**  
**ACS Superfund Site WA57, 46526.238**

**Reporting Period:** Week of June 16, 2003.

**BVSPC O/S Dates:** June 16, 17, and 19, 2003 (Ms. Peters).

Personnel Summary Affiliation	No. of Personnel	Responsibility
Montgomery Watson Harza	5	Respondent's General Contractor
Black & Veatch Special Projects Corp.	1	USEPA Oversight Contractor
Autumn Industries	1	Granular Activated Carbon Supplier
Carbonair	1	Carbon Distribution Piping Contractor
Austgen	3	Electrical Contractor
Fliteway	2	ONCA SBPA ISVE System Blower Shed Manufacturer

**Construction Activities**

**Major Activities:**

- Montgomery Watson Harza, Austgen, and Autumn Industries replaced the granular activated carbon in the groundwater treatment plant.
- Carbonair replaced the distribution piping in the granular activated carbon vessels.
- Austgen inspected the electrical boxes for the On-Site Containment Area Still Bottoms Pond Area in-situ soil vapor extraction system blower shed building #1 and observed code violations.
- Fliteway completed the wiring and replaced the electrical boxes for the On-Site Containment Area Still Bottoms Pond Area in-situ soil vapor extraction system blower shed building #1.
- Montgomery Watson Harza measured the water levels in the barrier wall extraction system and perimeter groundwater collection system piezometers in accordance with its Performance Standard Verification Plan.
- Montgomery Watson Harza held the weekly construction coordination meeting on June 19, 2003.

**Activities Performed:**

Autumn Industries and Montgomery Watson Harza (MWH) removed the granular activated carbon (GAC) from the carbon vessels on June 17, 2003. Autumn Industries was originally scheduled to remove the GAC

on June 16, 2003; however, the carbon truck required repairs and was postponed. During the GAC changeout activities on June 17, 2003; the carbon truck was unable to dewater properly. Autumn Industries dewatered the truck through gravity feed rather than pressurized feed because the screens on the truck were clogged. Carbonair replaced the distribution piping in the lag vessel on June 17, 2003. Because the work was conducted in the confined space of the vessel, MWH ventilated the vessel with fresh air prior to Carbonair's work. MWH also monitored the oxygen level and the lower explosive limit and completed a permit for the work prior to Carbonair entering the confined space. Carbonair donned a Tyvek suit and wore a full-face respirator. Carbonair did not replace the GAC in the lead vessel on June 17, 2003, because removing the GAC from the vessel took the remainder of the afternoon and MWH was not onsite to monitor the confined space work. Carbonair returned to the site on June 18, 2003, and completed its work in the same method as the previous day. MWH resumed operating the GWTP in recirculation mode on June 19, 2003. MWH reported that it expected to begin discharging on either June 20, 2003, or June 23, 2003.

Austgen was onsite on June 17, 2003, to begin wiring the On-Site Containment Area (ONCA) Still Bottoms Pond Area (SBPA) in-situ soil vapor extraction (ISVE) system blower shed building #1. Upon inspection of the exterior electrical boxes installed on the west wall of blower shed building #1, Austgen observed that the boxes were not installed to code requirements. Austgen observed that the conduit installed was not level and did not connect to the boxes properly. Austgen also observed that the boxes were installed at an angle against the exterior wall of blower shed building #1. Fliteway installed the conduit and boxes last week after extending the western wall of the ONCA SBPA ISVE system blower shed building #1 to accommodate the piping that connects to the GWTP. Austgen also reported that the seal for the explosion proof area must be relocated to the west because of the extension installed on the building.

Fliteway electricians arrived onsite on June 18, 2003, in order to complete the wiring for the extension to the ONCA SBPA ISVE system blower shed building #1. Fliteway replaced the exterior electrical boxes and conduit located on the exterior western wall of the shed in order for the equipment to be in compliance with the code. Fliteway completed its wiring on June 19, 2003, and demobilized from the site. MWH reported that Ryan Construction will complete the mechanical piping connections in the ONCA SBPA ISVE blower shed buildings early next week. Austgen is scheduled to complete the motor control center and remaining electrical wiring next Wednesday. MWH reported that it expects to begin starting up the ONCA SBPA ISVE system late next week by starting the blower and testing the control system while drawing atmospheric air. MWH reported that it does not expect to begin processing vapors from the ONCA SBPA ISVE system well field until mid-July.

MWH operated the Off-Site Containment Area (OFCA) ISVE system, treating the vapors in Thermal Oxidizer Unit 2. Thermal Oxidizer Unit 2 shut down early Thursday morning because of an alarm associated with a stuck pressure switch on the scrubber quench line. MWH disassembled the piping and removed the material that had built up in the lines and attempted to resume operating the unit on Thursday afternoon. MWH reported that the switch continued to malfunction. MWH began operating Thermal Oxidizer Unit 1 and ordered a replacement switch for Thermal Oxidizer Unit 2.

MWH measured the water levels in the barrier wall extraction system and perimeter groundwater collection system piezometers in accordance with its Performance Standard Verification Plan on June 18, 2003.



MWH held the weekly construction coordination meeting on June 19, 2003.

**Topics of Concern:**

- None to report.

**Concern Resolution:**

- None to report.

**Upcoming Activities:**

- Ryan Construction to complete connecting the mechanical piping in the ONCA SBPA ISVE system blower sheds.
- Austgen to complete installation of the control panel and MCC for the ONCA SBPA ISVE system.
- MWH to begin startup of the ONCA SBPA ISVE system.
- MWH to perform maintenance activities to address erosional damage to the OFCA engineered cover.

Signature: Leigh Peters

Date: June 24, 2003

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**WEEKLY CONSTRUCTION MEETING MINUTES  
FOR JUNE 19, 2003 MEETING  
AMERICAN CHEMICAL SERVICE, NPL SITE  
GRIFFITH, INDIANA**

**MEETING DATE:** Thursday, June 19, 2003

**MEETING TIME:** 10:00 AM

**MEETING LOCATION:** ACS Site – Site Trailer

**ATTENDEES:** Tom Tinics – MWH  
Todd Lewis – MWH (via telephone)  
Rob Adams – MWH (via telephone)  
Leigh Peters – BVSPC  
Peter Vagt – MWH (via telephone)  
Lee Orosz – MWH  
Kevin Adler – U.S. EPA (via telephone)  
Jon Pohl – MWH (via telephone)  
Chad Smith – MWH (via telephone)  
Rich Flores – Austgen Electric

**TOPICS:**

Health and Safety Summary

No health and safety incidents have occurred at the Site since the last meeting on June 13, 2003. Activities at the site during the past week included the continued operation of the groundwater treatment plant (GWTP) and Off-Site Area In-situ Soil Vapor Extraction (ISVE) system, construction activities associated with the Still Bottoms Pond Area (SBPA) ISVE system, and activities associated with changing out the granular activated carbon (GAC) vessels in the GWTP.

Due to the increased activity within the ACS facility, an entry and exit route map and an ACS facility chemical storage map will be developed to minimize potential interference with plant operations and exposure to plant hazards. An MWH health and safety professional will schedule a Site Audit to develop the map.

Groundwater Treatment Plant (GWTP) Status

The GWTP operated during the week at 15 gallons per minute. The carbon change-out and distribution piping replacement originally scheduled for June 16<sup>th</sup> was delayed and was not completed until June 18<sup>th</sup>. The proper confined space permits were prepared for Carbonaire and monitoring was performed during the work done inside the GAC vessels. The system was brought back online on June 18<sup>th</sup> in recirculation mode. The system will remain in recirculation mode until the effluent pH is at an acceptable level to discharge.

It is anticipated that the pH will be within the normal system range by the afternoon of June 20<sup>th</sup> or the morning of June 23<sup>rd</sup>.

The air compressor for the GWTP has showed some inconsistent operation. MWH will troubleshoot the system to isolate the difficulty and resolve the issue.

Influent water to the GWTP was collected from the Off-Site Barrier Wall Extraction System (BWES), the On-Site BWES extraction trenches, dual phase extraction wells in the SBPA, and the Perimeter Groundwater Collection System (PGCS).

#### Off-Site Area ISVE System

The Global Thermal Oxidizer/Scrubber unit (Therm Ox 2) is currently online treating vapors from the Off-Site ISVE system. Seventeen ISVE wells are currently online and are being sampled on a weekly basis. The unit operated without incident until June 19<sup>th</sup> when a fault with a pressure switch caused the unit to shut down. It is believed that the pressure switch is fouled and needs to be cleaned. The switch will be cleaned and the unit brought back online by the afternoon of June 19<sup>th</sup>.

#### SBPA ISVE System

Fliteway's electrical crew has been on site completing upgrades to the SBPA blower shed. Fliteway is scheduled to complete their work on June 19<sup>th</sup>. Austgen Electric will be on site beginning June 25<sup>th</sup> to complete their wiring of the blower shed. Ryan Construction will be on site June 23<sup>rd</sup> to complete connection of conveyance piping and manifold piping in the blower shed. The necessary health and safety monitoring will be performed when Ryan opens piping that has a potential to contain vapors. Initial startup of the blower shed is scheduled for June 27<sup>th</sup> or before.

#### Groundwater Monitoring Well Measurements

The second quarter water level monitoring was completed on June 18<sup>th</sup>, in accordance with the Performance Standard Verification Plan (PSVP). Water levels in monitoring wells along the PGCS and the Separation Barrier Wall were measured. No water level measurements were collected from ISVE wells.

#### Looking Ahead

Week of June 23, 2003	<ul style="list-style-type: none"><li>• GWTP/BWES/PGCS operation</li><li>• Off-Site ISVE operation</li><li>• Complete piping connections in the SBPA Blower Shed</li><li>• Install remaining electrical and control connections in the SBPA Blower Shed</li></ul>
Week of June 30, 2003	<ul style="list-style-type: none"><li>• GWTP/BWES/PGCS operation</li><li>• Off-Site ISVE operation</li><li>• Initial startup of the SBPA Blower Shed</li></ul>

Health and Safety Items to Monitor	<u>Items include:</u> <ul style="list-style-type: none"><li>• Completion of electrical work in the SBPA Blower Shed</li><li>• Completion of pipe connections in the SBPA Blower Shed</li></ul>
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Next Weekly Construction Meeting - Thursday, June 26, 2003, 10 a.m.

JDP/RAA/PJV

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**Weekly Oversight Summary Report No. 121**  
**ACS Superfund Site WA57, 46526.238**

**Reporting Period:** Week of June 23, 2003.

**BVSPC O/S Dates:** June 26, 2003 (Ms. Peters).

Personnel Summary Affiliation	No. of Personnel	Responsibility
Montgomery Watson Harza	2	Respondent's General Contractor
Black & Veatch Special Projects Corp.	1	USEPA Oversight Contractor
Austgen	1	Electrical Contractor
Ryan Construction	2	General Contractor

**Construction Activities**

**Major Activities:**

- Austgen completed hard wiring and installing the motor control center for the On-Site Containment Area Still Bottoms Pond Area in-situ soil vapor extraction system blower sheds.
- Ryan Construction connected piping in the On-Site Containment Area Still Bottoms Pond Area in-situ soil vapor extraction system blower shed building #1.
- Montgomery Watson Harza resumed discharging from the groundwater treatment plant.
- Montgomery Watson Harza held the weekly construction coordination meeting on June 26, 2003.

**Activities Performed:**

Austgen completed hard wiring and installing the motor control center for the On-Site Containment Area (ONCA) Still Bottoms Pond Area (SBPA) in-situ soil vapor extraction (ISVE) system blower shed buildings. On Thursday, June 26, 2003, American Chemical Services (ACS) had a leak in the piping to its bromine tank. MWH required Austgen to cease activities in the ONCA SBPA ISVE blower sheds until the leak was mitigated by ACS. Montgomery Watson Harza (MWH) reported that it expected to begin system testing next week, testing the blower and control systems on fresh air. MWH reported that it anticipated pulling vapors from the ONCA SBPA ISVE well field by the end of next week.

Ryan Construction began connecting the piping from the groundwater treatment plant (GWTP) to the manifold and equipment in the ONCA SBPA ISVE system blower shed building #1. MWH reported that it performed air monitoring during piping activities. Ryan Construction was unable to complete connecting the blower to the 8-inch-diameter HDPE piping because it was waiting on a stainless steel vibration-proof

coupling. MWH reported that Ryan Construction was also unable to connect the effluent piping from the central dual phase extraction wells because it was waiting on several ball valves. MWH reported that Ryan Construction is expected to have the parts and complete installation early next week.

MWH reported that it received a new pressure switch for Thermal Oxidizer Unit 2 on Friday, June 27, 2003. MWH reported that it will install the new switch next week and resume operating Thermal Oxidizer Unit 2. MWH continued to operate the Off-Site Containment Area ISVE system, processing vapors in Thermal Oxidizer Unit 1.

MWH reported that it resumed discharging treated water from the GWTP on June 21, 2003, once the pH of the water was within the correct range to discharge. MWH reported that its corporate Health and Safety officer performed an unscheduled inspection of its facility on June 24, 2003. MWH reported that the officer did not find any deficiencies associated with MWH's operations. MWH also reported that it will install placarding on the ONCA SBPA ISVE blower shed buildings requiring the appropriate personal protective equipment for the buildings such as eye and ear protection.

MWH held the weekly construction coordination meeting on June 26, 2003.

**Topics of Concern:**

- None to report.

**Concern Resolution:**

- None to report.

**Upcoming Activities:**

- Ryan Construction to complete connecting the mechanical piping in the ONCA SBPA ISVE system blower sheds.
- MWH to begin startup of the ONCA SBPA ISVE system.
- MWH to perform maintenance activities to address erosional damage to the OFCA engineered cover.

Signature: Leigh Peters

Date: June 24, 2003

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**WEEKLY CONSTRUCTION MEETING MINUTES  
FOR JUNE 26, 2003 MEETING  
AMERICAN CHEMICAL SERVICE, NPL SITE  
GRIFFITH, INDIANA**

**MEETING DATE:** Thursday, June 26, 2003

**MEETING TIME:** 10:00 AM

**MEETING LOCATION:** ACS Site - Site Trailer

**ATTENDEES:** Tom Timics - MWH  
Todd Lewis - MWH (via telephone)  
Rob Adams - MWH (via telephone)  
Leigh Peters - BVSPC  
Peter Vagt - MWH (via telephone)  
Kevin Adler - U.S. EPA (via telephone)  
Mark Travers - Environ (via telephone)  
Jon Pohl - MWH (via telephone)  
Chad Smith - MWH (via telephone)  
Chris Daly - MWH (via telephone)

**TOPICS:**

Health and Safety Summary

No health and safety incidents have occurred at the Site since the last meeting on June 19, 2003. Activities at the site during the past week included the continued operation of the groundwater treatment plant (GWTP) and Off-Site Area In-situ Soil Vapor Extraction (ISVE) system and connection of control and electrical wiring in the Still Bottoms Pond Area (SBPA) blower shed.

Mike Grasso, a MWH Health and Safety Officer, conducted an unannounced health and safety audit of the Site on June 24<sup>th</sup>. Mr. Grasso indicated that there were no deficiencies with the Site. MWH is in the process of scheduling sampling of the ISVE wells by a Health and Safety professional.

Groundwater Treatment Plant (GWTP) Status

The GWTP was shut down from June 16<sup>th</sup> to June 18<sup>th</sup> for routine maintenance and change out of carbon in the GAC System. Following the carbon change out, the system was started up in recirculation mode (on June 18<sup>th</sup>) due to elevated pH levels resulting from carbon fines temporarily entering the process water which is typical after a carbon change out. The system was put into normal mode on June 21<sup>st</sup> when the system monitoring showed that the carbon was activated and the pH had returned to normal.

The GWTP operated during the week at 20 gallons per minute.

Influent water to the GWTP was collected from the Off-Site Barrier Wall Extraction System (BWES), the On-Site BWES extraction trenches, dual phase extraction wells in the SBPA, and the Perimeter Groundwater Collection System (PGCS).

#### Off-Site Area ISVE System

The Thermal Oxidizer/Scrubber Unit 1 (Therm Ox 1), manufactured by Durr, has been online treating vapors from the Off-Site ISVE system since June 18<sup>th</sup> when the Thermal Oxidizer/ Scrubber Unit 2 (Therm Ox 2), manufactured by Global, shut down due to a malfunctioning flow switch. The flow switch in Therm Ox 2 is scheduled to be fixed on June 30<sup>th</sup>. Eight ISVE wells are currently online.

#### SBPA ISVE System

Upgrades to the SBPA blower shed were completed by Fliteway on June 20<sup>th</sup>. Austgen Electric was on site beginning June 25<sup>th</sup> to complete their wiring of the blower shed and are scheduled to finish on June 27<sup>th</sup>. The remaining pipe connections are scheduled to be completed the week of June 30<sup>th</sup>. The necessary health and safety monitoring will be performed when working on piping that has a potential to contain vapors. Initial startup of the blower shed is scheduled for the week of June 30<sup>th</sup>.

#### Groundwater Monitoring Well Measurements

The second quarter water level monitoring was completed on June 18<sup>th</sup>, in accordance with the Performance Standard Verification Plan (PSVP). Water levels were measured in monitoring wells along the PGCS and the Separation Barrier Wall. No water level measurements were collected from ISVE wells.

#### Off-Site Cover

The areas of the Off-Site cover where erosion damage was previously noted have been inspected by MWH. A memorandum detailing the planned correction actions for these damaged areas will be submitted to the Agencies for review the week of June 30<sup>th</sup>.

#### Design Refinements

The SBPA blower shed effluent piping material specified in the blower shed design package to Fliteway was stainless steel or other material rated for 200 degrees Fahrenheit. However, CPVC piping was installed. CPVC has a temperature rating of 190 degrees Fahrenheit and is installed in the same service in the Off-Site Area ISVE blower shed.

#### Looking Ahead

Week of June 30, 2003	<ul style="list-style-type: none"> <li>• GWTP/BWES/PGCS operation</li> <li>• Off-Site ISVE operation</li> <li>• Initial startup of the SBPA ISVE system.</li> </ul>
Week of July 7, 2003	<ul style="list-style-type: none"> <li>• GWTP/BWES/PGCS operation</li> <li>• Off-Site ISVE operation</li> <li>• SBPA ISVE operation</li> </ul>



Health and Safety Items to Monitor	<u>Items include:</u> <ul style="list-style-type: none"><li>• Startup of SBPA ISVE system including monitoring of the system piping for leaks</li></ul>
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Next Weekly Construction Meeting - Thursday, July 3, 2003, 10 a.m.

JDP/PJV/RAA/TAL

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(90)

6/3/03

JFB Epton

0730 Arrive on-site, Overcast, light rain, NW winds, 50°F

### Personnel Present

Tom Thies MWH

Terry Frisk Ryan

Jerry Clark Ryan

Tim Kirkland Austgen

Lurch Peters BVSPC

Tom Thies discussed plan for venting lines. Tim Kirkland (40-hr trained) to assist Jerry Clark (NOT 40-hr trained) in venting/blowing out lines - end caps are off. Possible for them to work in only groups that are in use if desired. MWH to survey with PID and to perform periodic air monitoring. blower to operate continuously in shed.

0750 Went to DNCA, observed that Austgen cut open blowershed and that the shed was placed on the concrete pad.

0752 Roll 42 Photo 12 facing east showing the cut out in building to allow for piping.

T. Kirkland reported Flitway to remove rest of wall needing the extension to the building. T. Kirkland also cut blower

JFB Epton

6/3/03

JFB Epton

(91)

shed from where piping stacks up to allow room for connections.

0810 T. Thies reported that a 40-hr trained person is working around with Jerry at all times and will perform air monitoring. Also, to blow out lines that will be connected today. Also, Ryan to tape up holes for pitot tubes as the wells are connected to manifold. Spoke with L. Campbell and stressed concern over Jerry not working with 40-hr trained buddy during activities.

0820 Roll 42 Photo 13 facing W showing interior of blowershed after placed and floor cut out for piping.

0822 Roll 42 Photo 14 facing W of Austgen blowing out SVE-DB. MWH requiring minimum blow out time of 30 sec.

PID readings at 2 ppm max in piping - PID reading 0 ppm in breathing zone. MWH opened adjacent wall and PID rose quickly to 20 ppm. MWH acknowledged that lines need to be blown out and that there is potential in these lines.

0830 Roll 42 Photo 15 facing S showing Austgen blowing out third line.

JFB Epton

(92)

6/3/03

Jeff Epstein

- 0840 Austgen recapped wells in order to cut out flooring for clearance for connecting piping.
- 0847 Roll 42 Photo 16 facing SSW showing Austgen cutting out floor for clearance to walls. Note all wells capped.
- 0850 Rich Flores on site - Thermax 2 faults and shuts down Thermax 1. Austgen to look at programming - believes he went to Thermax 1 programming. Ryan numbering pipes - waiting for fittings before starting to open any pipes.
- 0940 Returned to trailer to review reports.
- 1020 Ryan reported that it is still waiting to get the fittings before starting work.
- 1030 Ryan reported that it is not connecting the piping in the same manner as the OFCA - the fittings will not be installed; the clear flex pipe is being installed right over piping in slab. Ryan reported it uncapped a few wells with Tim and the PID read 0.02 ppm - 0.03 ppm. Max.
- 1038 Roll 42 Photo 17 facing S of piping connections and Tim Kirkland air monitoring at SEBS.
- 1050 Roll 42 Photo 18 facing S of Ryan installing

Jeff Epstein

(93)

6/3/03

Jeff Epstein

- clear flex piping.
- 1055 PID readings ranging from 0 ppm to 0.2 ppm.
- 1110 Observed Ryan and Austgen disassemble rigging from crane lift. Ryan waiting on clamps.
- 1135 Ryan quitting for day - clamps not delivered to site today. IES formed for concrete pads at east OFCA wells but not pouring concrete today because of weather. Rebar not installed in forms.
- 1145 T. Tines reported Global to be on site 6/4/03 to perform final system checks and calibrations on Thermax 2. Thermax 1 currently processing OFCA vapors as of this weekend. Fltway to assemble and install building extension for EP next week. IES work weather dependent - T. Tines not sure when to be back on site.
- 1200 Left site for day.

Jeff Epstein  
6/3/03

(94)

6/5/03

L. Peters

0730 Arrive onsite, Sunny, W Wind, high 60s.

~~0735~~ 0750 Left site to get camera

0750 Return to site. Personnel Present:

\* Tom Tinics MWH

Tom Evers Ryan

Jerry Clark Ryan

Terry Frisk Ryan

Tim Kirkland Austgen

\* Leigh Peters BVSAC

Went to blower shed - OFCA. Ryan installing

float switches in condensate knockout tank

PID reading 1.2 - 1.4 ppm inside tank, Oppm in

breathing zone. MWH ran on ambient air

overnight to flush OFCA ISVE system and

closed off headers to vapor TP well field.

MWH also removed liquid. T. Tinics reported

Global onsite yesterday and completed its

work. Thermox 2 ran overnight on fresh

air and tracked correctly. Ryan connected

75% of onsite yard piping to manifold -

to complete today. T. Tinics reported that

no problems with piping - T. Tinics or C. Da'g

continuously out with Ryan yesterday.

T. Tinics reported that one TP was shut

down yesterday - back pressure building

L. Peters

(95)

6/5/03

L. Peters

up because of clogging in carbon units. MWH  
looking to speed up carbon changeout.0827 Roll 43 Photo 1 facing SSW showing Ryan drilling  
hole in condensate knockout tank in OFCA  
blower shed for installation of float switch.  
T. Kirkland performing periodic air monitoring  
of breathing zone.0844 Roll 43 Photo 2 facing SE of Ryan installing  
liquid level transmitter into OFCA blower shed  
condensate knockout tank.0855 Roll 43 Photo 3 facing SE of Austgen + Ryan  
assembling knockout tank.0859 Roll 43 Photo 4 facing W of T. Kirkland in  
respirator tank looking for offset distance  
from transmitter to bottom of tank - Ryan  
to measure different way - don't read tape.  
PID of breathing zone is Oppm, but was  
elevated at day to knockout tank  
bottom - PID 5-10 ppm.0925 Returned to trailer. Filterway to be onsite this  
afternoon, IES poured concrete pads yesterday  
to return tomorrow. Austgen has approx 2  
more weeks of work. R. Adams reported  
that water levels have not been collected  
since Rudy's incident. L. Peters asked

L. Peters

(96)

6/5/03 Jeff &amp; Peter

T. Tinies about L. Dross's photos of the erosion repair on the ONCA SBPA.

Tina Tinies not sure where photos are

I will ask Lee when he returns.

1000

Weekly construction meeting

Attendees - \* on previous plus:

Rob Adams MNH

Kevin Adler USEPA (via phone)

Peter Vagt MNH (via phone)

Todd Lewis MNH (via phone)

Jon Pohl MNH (via phone)

HHS: no incidents, MNH's HHS procedures for ONCA piping connections were

followed. Caustic addressed in GWTIP.

Increase in Mosquitos - MNH to mitigate by possibly fogging plant.

GWTIP: op at 20 gpm until yesterday.

MNH shut down plant because of high backpressure associated with carbon and sand units. MNH restarted today at 10 gpm and to operate part time during days.

Carbon change for 6/16/03 - 1 day of work. MNH to also replace piping.

MNH to address confined space work and ordered new respirators.

Jeff & Peter

(97)

6/5/03

Jeff &amp; Peter

Thermox 2 not yet programmed for GWTIP vapors, to be complete in next week.

ONCA LEVE: Thermox 1 offline in week, off line and Thermox 2 online. Maintenance of installing new level transducer in remote-out tank today. Well field to be back on line today. Durr to be reconfigured.

ONCA: Removed portion of west end of building and set on pad. Ryan connecting piping to be complete today.

L. Peters expressed comment on HHS and non-40 hr trained personnel working on piping. MNH reported that its process was to eliminate potential for exposure and will give earlier report of its health/safety activities for work to be performed. MNH found discrepancies in blower shed and design. Filterway to be onsite this afternoon to begin changes. Filterway to return Monday & install extension to shed, complete by Wednesday. Austgen expected to complete its work in 2 weeks. IES poured 4 pads yesterday, to remove and set forms tomorrow. Expect

Jeff & Peter

(98)

6/5/03

J. J. &amp; P. J.

to finish pour morning - be completed  
next week.

OFCA covers ECI resumed cover last Fri.  
Look Ahead Next Week:

reconfigure/wire ONCA shed

Thermox 2 on line w/ OFCA 15VE

GNTP op at 10 gpm

Done off line (Thermox 1)

IES to finish concrete pads

2 weeks:

GNTP Carbon charging unit + op

Austgen to complete its work ONCA 15VE

Look Ahead H+S

Piping to be complete today.

Electrical Hazards w/ Austgen

Hot work w/ Fitteway

MWH internal meeting for H+S 6/12

1045 Mtg conclude - next meeting 6/13/03 @ 10am

1100-1115 Spoke with Larry Campbell on site  
activities.

1120 Went to ONCA, observed Ryan cutting pipe,  
Ryan not to install until 40-hr trained  
personnel onsite.

1130 Roll 43 Photo 5 facing W of T. Kirkland  
blowing out well, note connected wells

*J. J. & P. J.*

(99)

6/5/03

J. J. &amp; P. J.

1155 Roll 43 Photo 6 facing N of Ryan installing  
fix pipe on 15VE-53.

1210 Fitteway arrived onsite, beginning to work on  
building - Ryan not connecting piping - just  
clamps. Spoke w/ T. Timics, he reported  
he held H+S w/ Fitteway and informed  
him of Ryan's work.

1220-1250 Left site for lunch.

1255 Went to ONCA, Fitteway finished with  
leaking at wiring. Not on site. Ryan connecting  
piping.

1330 Roll 43 Photo 7 facing W of condensate knockout  
tank in ONCA shed and containment in the  
flooring.

1350 Went to trailer to review reports. ONCA  
SDRA interview cover OK.

1445 Ryan Construction reported 4 wells still  
need connecting to the manifold; completed  
work for today however.

1500 Left site for day

*J. J. & P. J.*  
6/6/03

(100)

6/10/03

Jeff Epstein

0735 Arrive onsite, SE wind, overcast, 70°

thunderstorms forecasted.

Personnel onsite:

Lee Orosz MNH

Lane DeBartolo IES

Terrence Jones IES

Ted Schmetberg FliteWay

Jeff Lein FliteWay

Rynaldo Gonzalez FliteWay

Kevin Finkl FliteWay

Tom Tinnes MNH

Lilgh Peters BVSPL

0740 Went to ONCA to observe FliteWay's work  
on blower shed building #10745 Roll 43 Photo 8 facing ESE of extended  
frame to ONCA 15VE shed building #1.IES onsite to repair concrete pad at  
Aushmount DPE well 5VE- . IES did  
not have sufficient concrete about 1/2 cy  
short. IES to remove forms from remaining  
walls. All piping from walls to manifold  
connected as of last Friday 6/6/030757 Roll 43 Photo 9 facing SSE of extension  
to blower shed floor to enclose piping to  
GWTP

6/10/03

Jeff Epstein

(101)

0805 Roll 43 Photo 10 facing SW of concrete  
pad for 5VE-46 and 45-1Earlier T. Tinnes & MNH reported FliteWay  
is installing a skirt around the base of  
the blower sheds and filling void space with  
caulking because existing base of sheds are  
not sitting flush on the concrete. L. Orosz  
reported concrete pour for final pad at 1100.0830 Roll 43 Photo 11 facing SE at FliteWay  
installing framing and cutting roof supports0853 Heavy rain beginning. FliteWay completing  
end wall framing.0900 FliteWay stopped work to see train will  
pass. Went to trailer and looked at  
MNH's photos of ONCA interior clay  
cover. IES cancelled concrete pour.

0925 Rain stopped, FliteWay to resume work.

0930 Rain resumed. Went to ONCA FliteWay installing  
supports in ceiling of extended building frame.0950 Rain slowing down, light sprinkles. FliteWay  
installing plywood.1000 Roll 43 Photo 12 facing S of FliteWay  
installing plywood.1040 Spoke with T. Tinnes, GWTP at 15 gpm -  
T. Tinnes switched carbon unit 3 to

(102)

6/14/03

Yaff &amp; Patten

operate in parallel rather than series, relieving some of the backpressure. OFCA KVE operating on 5 to thermox 2. Carbon changeout still scheduled for 6/16/03

1050-1055 Spoke with L. Campbell on site activities.

1107 Roll 43 Photo 13 facing W of interior of extended blower shed.

1115 Roll 43 Photo 14 facing NE of Fliteway holding skirt to base of blower shed building #1; note building #2 with gaps to also get skirt.

1130 Left site for day

~~Yaff & Patten~~  
~~6/16/03~~

6/16/03

Yaff &amp; Patten

(103)

0730 Arrive onsite sunny, clear, 6B of light breeze from North

Personnel Present:

Lee Orosz MWH

Tim Kirkland Arostegui

Leigh Peters BVSRC

Activities scheduled for today:

① GUTP carbon changeout / confined space work

② Fliteway to complete electrical in blower shed building #1

0745 Went to ONCA, observed concrete pads for flushmount wells completed and forms removed. extension to building #1 completed. Perimeter fencing is down on eastern boundary of ONCA SBPA - will mention to MWH.

0800 Roll 43 Photo 15 facing SW of SW corner extension of the ONCA SBPA KVE system blower shed #1

0802 Roll 43 Photo 16 facing W of western wall extension installed in blower shed building #1

0804 Roll 43 Photo 17 facing ESE of blower silencer and knockout tank in shed #1

Yaff & Patten



(104)

6/16/03

L. E. Peters

0810 Spoke with L. Orosz. he reported that the carbon supplier just called this morning and cancelled - rescheduled for tomorrow. He also reported that Fliteway has rescheduled for Wednesday. No activities for today.

0825 L. Orosz reported that the carbon changeout is scheduled for tomorrow. Representative from Carbonair will perform the replacement of the distribution piping within the confined space.

0830 Left site for day

~~L. E. Peters  
6/16/03~~

6/17/03

L. E. Peters

(105)

0746 Arrive Onsite, Sunny, 65°F

Personnel Present

Lee Orosz	MWH
George Carpa	Autumn Industries
Dwayne Austgen	Austgen
Lanny Allen	Austgen
Tim Kirkland	Austgen
Tom Tinic	MWH
L. E. Peters	AVSFC

MWH and Autumn Industries beginning changeout of carbon. Austgen working on electrical for ONCA ISVE system.

0755 Went to ONCA, MWH and Austgen discussing electrical box mounted on exterior west wall of building #1

0800 Roll 4/3 Photo 1B facing west of code violations of electrical boxes on exterior west wall of blower shed building #1. Violations are that conduit not level, and supporting bracket for lower box not installed. Frame for box is not plumb. Austgen also reported that it will need to relocate seal off for explosion proof area due to building extension.

0825 Went to ONTP, MWH changing out

L. E. Peters

(106)

6/17/03 Jgh SPeter

Carbon. L. Orosz reported that MWH pressurizes carbon units, push carbon to truck, repeats process.

0830 Roll 43 Photo 19 facing S showing Austgen adding water to carbon unit. Note carbon truck and hoses from unit to truck. MWH fills tank with water, rinsing carbon off sides of tank, then pressurizes to force fluidized carbon to truck.

0850 T. Tiares reported OFCA ISVE system running w/o incidents. L. Orosz reported that Austgen still needs to change program logic to vacate GNIP vapor stream to Thermax Unit 2.

0930 Roll 43 photo 20 facing ~~SSB~~<sup>SSB TP</sup> of L. Orosz rinsing out tank, note manhole on side open. point of entry to tank.

0935 Roll 43 Photo 21 facing SSB of Austgen shovelling excess carbon from tank.

0945 Roll 43 Photo 22 facing SE showing distribution piping to GAC tank.

0955 MWH began ventilating the first carbon tank now that the GAC has been removed.

1015. Representative from Carbonair onsite

Jgh SPeter

(107)

6/17/03

Jgh SPeter

for confined space entry into GAC tanks.

1047 L. Orosz monitored O<sub>2</sub> and LEL in tank.

O<sub>2</sub> at 21.1%, LEL = 0.0. MWH to continuously vent tank during piping activities.

1055 Roll 43 Photo 23 of Carbonair personnel inside confined space. Note permit posted to the right of the opening by MWH. - 5

1106 Roll 43 photo 24 facing S of distribution piping removed - five slots are clogged.

1126 Roll 43 Photo 25 facing SW of Carbonair replacing piping.

1135-1140 Spoke with L. Campbell on site activities.

1210-1230 - Break for lunch, Autumn having difficulties dewatering truck.

1245 MWH decided to have Austgen and Autumn complete dewatering tanker and to remove carbon in second vessel tonight. Carbonair to return tomorrow morning to complete replacing distribution piping.

1330 Austgen still cleaning GAC from lead tank.

Austgen reported that about 2/3 of GAC removed from lead tank. MWH left site for day. Austgen + Autumn to complete work.

1350-1430 worked on weekly reports.

1430 Continued to observe Austgen and Autumn

Jgh SPeter

(108)

6/17/03

Jeff S. Pitzer

rem ove GAC from lead vessel.

1435 Roll 43 Photo 26 facing S of Austgen washing down GAC in vessel, while the carbon truck demeters under gravity flow since pressure flow not working because screens on truck are clogged. Austgen reported it was making slow progress on removing carbon.

1440 Autumn tried hooking up piping to blow water from tank to tank T-4.

1445 Roll 43 Photo 27 facing N/E of 12-inch pipe installed for influent to thermox 2 at manifold in GWTP.

1450 Autumn continued to demeter through gravity because screens were clogged and pressurizing the tank did not allow for better demetering.

1500 Left site for day

~~Jeff S. Pitzer~~  
6/17/03

(109)

6/19/03

Jeff S. Pitzer

0730 Arrive onsite, sunny + clear NW wind, 65°F  
Personnel Present:

\* Lee Drosz

MWH

Ted Schnoberg

Fliteway

\* Leigh Peters

BVSPC

Activities today:

- ① Fliteway to finish electrical in blower shed #1 extension
- ② MWH to clean plant
- ③ Construction meeting.

0745 Went to ONCA, observed Fliteway working on installing electrical for fan in blower shed building #1.

0750 Roll 44 Photo 1 facing east of new mounting for electrical boxes and reinstalled conduit.

0800 Returned to GWTP. Drosz reported carbon and distribution piping in GAC units were successfully replaced yesterday. Also on registers on Thermox 2 control panel, it appears system not operating.

0810 Roll 43 Photo 2 facing W of ponded water at catch basin on S portion of cap, immediately west of access road.

0815 Roll 43 Photo 3 facing SW of ponded water on SE corner of cap at ACS bldg to undation.

Jeff S. Pitzer

110

6/19/83

Jeff Roberts

- 0825 spoke w/T. Tinies, he reported pressure switch on scrubber not operating properly. T. Tinies reported that he would start cleaning out switches to see if that fixes problem.
- 0910 Flitway reported that it should complete its work in the blower shed today. MWH having Flitway look at compressor at ENTP. MWH encountering problems with ~~the~~ losing pressure.
- 0925 Told T. Tinies about the fence on ONCA being down. T. Tinies thought related to yesterday's heavy storms. He reported MWH will fix.
- 0935 Inspected alarms on Thermax 2, T. Tinies reported unit went down at 7 AM. I asked T. Tinies about OFCA erosion. He reported Austgen Landscaping to come out and look at ponding. May need to fill in low spot at ENZOC. MWH continuing to develop plan regarding erosion cuts on West part of exp.
- 0950 Roll 44 Photo 4 of MWH removing screens from Thermax 2 scrubber piping.
- 0952 Roll 44 Photo 5 facing SE of screen and

Jeff Roberts

111

6/19/83

Jeff Roberts

- particulate material from scrubber water.
- 1000 Weekly Construction Meeting  
Personnel Present - \* plus  
Rich Flores Austgen T. Tinies MWH  
via phone:
- Kevin Adler EPA Peter Vagt MWH  
Todd Lewis MWH Rob Adams MWH  
John Pohl MWH Chad Smith MWH  
H+S No problems. Continued space entry into GAC vessels was successful.
- EWTP. GAC replaced GAC on Tues/Wed. MWH to start discharging either Fri afternoon or Monday. MWH began operating plant in recirculation mode this morning. MWH having problems with air compressors, looking into options.
- Thermax 2: Op until 7 AM this morning when fault registered this morning due to clogged switch. MWH cleaning switches and to resume processing OFCA 15% vapors by noon. Simulabs to collect samples ~~for~~ JP today.
- ONCA: Flitway finishing electrical today. Austgen to return next Wednesday to complete electrical. Ryan to contact

Jeff Roberts

(112)

6/19/03 JAB/ERW

remaining piping on Mon & Tuesday.

Water Levels: C. Smith and R. Stein

collected PVE water levels yesterday.

They reported that they were not close to ISVE well fields, did not observe any odors, but did have respirators just in case.

ONCA Cap: MNH reported interim cap complete, could begin initial start up of ISVE next week.

Look Ahead: Austgen electrical, Ryan piping. Austgen 2 equipment to look at OFCA erosion.

Look Ahead HRS: Lockout / tagout of equipment, deenergizing power during electrical work. One piping connection with potential for vapors, MNH to ventilate. MNH to work with ACS regarding its (ACS's) hazards on ONCA.

1030 Mtg Conclude, Next meeting 6/26/03 @ 10

1035 - 1045 Spoke with L. Campbell on site activities.

1050 T. Timics reported "start up" of ONCA

ISVE next week would involve controls

and bumping blower with atmospheric

JAB/ERW

(113)

6/19/03

JAB/ERW

air. Procent controls, Cap activities not until late fall, early next year. Sending ONCA ISVE vapors not to start until July after system & controls are proved out.

1115 Spoke with T. Timics, he reported BWES extraction well pumps are programmed to operate under a certain head, and if less than, then timer starts for well to recharge and operate when sufficient head available. No float switches in wells. ONCA DPE wells are pneumatic and can pump dry without damaging pump.

1125 Observed Austgen & MNH discussing additional monitoring for Thermax1. MNH reported that it will resume processing OFCA vapor in Thermax1 when the ONCA ISVE system begins operating.

1135 Left site for day

JAB/ERW  
6/19/03

(114)

6/26/03

J. E. Peters

0730 Arrive Onsite, Cloudy, light drizzle, SE Wind, 70's.  
Personnel Present:

Lee Cross MWHT

\* Tom Tinics MWHT

\* Leigh Peters BVSPC

Observed Thermax-1 processing ONCA ISVE vapors. Thermax 2 appears to not be operating.

0735 Went to ONCA, observed fence line around ISVE well field has been restored since last week. Went to ONCA ISVE blower shed building #1. Observed Ryan replaced condensate knockout tank Sch 40 PVC with Sch 80 PVC piping. Also observed that some piping connections have been completed. Connection to 8-inch 4 line #13 still needed down from blower effluent.

0750 Spoke with T. Tinics, he reported that Ryan waiting on SS vibration coupling to be installed on stallion of blower, 2 ball valves for water line from DPE wells. Also Ryan needs to modify header at GWTP which will require the GWTP to not pull water for one day - Ryan still

J. E. Peters

6/26/03

J. E. Peters

(115)

waiting on parts. T. Tinics also reported that he ordered new pressure switch for Thermax 2; checking out old switch + flow meters didn't solve error last week. T. Tinics also reported that the GWTP resumed discharging on Monday.

0835 T. Tinics reported if Austgen to complete hard wiring of ONCA ISVE sheds as scheduled, then Austgen to replace faulty panel control in shed #2 and begin prove-out + system startup on Monday. Ryan supposed to get piping tomorrow - if so to install tomorrow. If not, Austgen can still do start-up on Monday with only atmospheric air circulating in building #1. MWHT hoping to begin processing vapors mid next week, provided new pressure switch for ~~TP~~ Thermax 2 arrives. T. Tinics also reported that MWHT corporate HSE officer conducted impromptu inspection on Tuesday - only comment was for signage in shed.

0850 Went to ONCA, ACS having bromine leak + evacuating line. MWHT asked Austgen to leave shed until leak is fixed. Austgen began working on phone line in GWTP, light rain

J. E. Peters

(116)

6/26/03

J. R. P. R.

starting. Went to trailer to work on reports

1000 Weekly Construction Meeting

\* on previous plus via phone:

Karla Adker EPA Peter Vagt MWH

Todd Lewis MWH Rob Adams MWH

Jon Pohl MWH Chris Daly MWH

Chad Smith MWH <sup>OP</sup> ~~Ken~~ Mark Travors

H+S: No incidents, Austgen Electric only <sup>on line</sup>

Subs installed today. MWH Corporate performed spot H+S check on facility - conclusion was that the site was not deficient.

GWTP: pH was within range on 6/21 -

MWH resumed discharging, Plant op at 20 gpm

DFCA ISVE: running on Thermax 1 since

last Wednesday. Thermax 2 down for maintenance on switch. expect Thermax 2 to be online Monday. MWH processing vapors from B SVE wells.

ONCA ISVE: Ryan completed most of connections, still need to connect blower effluent to header and water line from central 3 DPE wells. Ryan to modify manifold at GWTP to accommodate 2" & water line from central DPE wells.

J. R. P. R.

(117)

6/26/03

J. R. P. R.

MWH expects ONCA ISVE identical to be complete for startup on ambient air on Monday - hoping to pull vapors by Tues/Wed. Several ONCA DPE wells on-line as of this morning.

Water Levels: completed last week. MWH resurveyed elevations of some piezometers.

Design Refinements: blower effluent piping in Flitway RFB specified stainless steel piping or rating of 200°F. MWH approved installation of CPVC which is rated for 190°F.

Look Ahead: 6/30 - ISVE system op. GWTP hope for ONCA ISVE system op. 7/7 - DFCA ISVE/GWTP op - monitoring of ONCA ISVE system.

MWH to circulate memo w/in 1 week of DFCA cover maintenance activities + schedule.

Look Ahead H+S: startup of ONCA ISVE monitoring for any leaks. H+S sampling at plant by MWH H+S officer.

Next Mtg: July 3 @ 10am - <sup>MWH</sup> Proposed meeting every other week until 7/3

1030 Mtg. Concluded

J. R. P. R.

(118)

6/26/03

J. G. Peter

- 1045-1050 Spoke w/ L. Campbell on site activities
- 1100 Roll 44 Photo 6 facing NW of connected  
AS and OPE air supply lines.
- 1103 Roll 44 Photo 7 facing W of Austgen  
wiring shed. building #2.
- 1105 Roll 44 Photo 8 facing W of connected  
8" & piping.
- 1107 Roll 44 Photo 9 facing SW of blower effluent  
and steel air supply line from GUTP, leaving  
slab to connect to air supply lines in  
building #2.
- 1110 Roll 44 Photo 10 facing E or W wall of  
building #1 - air intake on right (NITE),  
exhaust from blower on left.
- 1125 Left site for day

~~11/11/03~~  
06/26/03

7/3/03

J. G. Peter

(119)

0730 Arrive onsite, 75° clear, sunny, SSE wind.

Personnel Present:

X Lee Orosz	MWH
Rich Flores	Austgen
Mike Larson	Austgen
X Chris Daly	MWH
X Leigh Peters	BUSEC

Spoke with C. Daly. He reported ACS closed today - MWH trying to get access. He also reported that they are working on getting programming bugs out of the ONCA SPRA thermox/ISVE system. C. Daly reported mostly pulling fresh air, but he did open well head briefly yesterday to test thermox reaction.

0800 ACS opened gates. L. Orosz reported that the GUTP operating at 20 gpm - performed maintenance on GUTP this week. C. Daly reported that Austgen also working on programming for GUTP vapor streams to be rerouted from the catox to thermox 2. C. Daly hopes to get ONCA ISVE system operating today; but reported that he did not intend to operate it over the weekend.

0804 Roll 45 Photo 1 facing S of SS vibration

J. G. Peter





Site: American Chemical Services, Inc.

Proj. #: 46526

Roll: 42 Photo #12

Date: 06-03-03 Time: 07:52

Photographer: Leigh Peters

Description: Photo facing east showing the cut in the ONCA SBPA ISVE system blower shed building #1 to allow for the piping.



Site: American Chemical Services, Inc.

Proj. #: 46526

Roll: 42 Photo #13

Date: 06-03-03 Time: 08:20

Photographer: Leigh Peters

Description: Photo facing west showing the interior of the ONCA SBPA ISVE system blower shed building #1 after the floor was cut to accommodate the piping.





Site: American Chemical Services, Inc.

Proj. #: 46526

Roll: 42 Photo #14

Date: 06-03-03 Time: 08:22

Photographer: Leigh Peters

Description: Photo facing west showing Austgen blowing out the yard piping line to SVE-88.

Site: American Chemical Services, Inc.

Proj. #: 46526

Roll: 42 Photo #15

Date: 06-03-03 Time: 08:30

Photographer: Leigh Peters

Description: Photo facing south showing Austgen blowing out the yard piping to additional ONCA SBPA ISVE system wells.





Site: American Chemical Services, Inc.

Proj. #: 46526

Roll: 42 Photo #16

Date: 06-03-03 Time: 08:47

Photographer: Leigh Peters

Description: Photo facing south-southwest showing Austgen cutting the floor of the blower shed to accommodate the yard piping. Note yard piping stubs are capped.



Site: American Chemical Services, Inc.

Proj. #: 46526

Roll: 42 Photo #17

Date: 06-03-03 Time: 10:38

Photographer: Leigh Peters

Description: Photo facing south showing the piping connections and Austgen performing air monitoring of the yard piping to SVE-85.





Site: American Chemical Services, Inc.

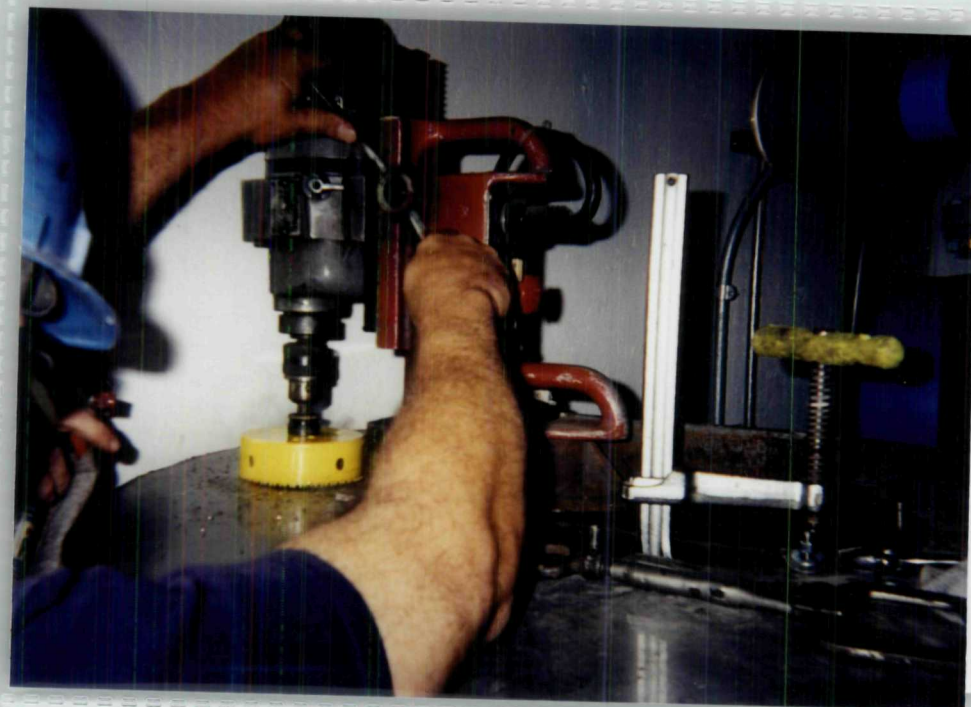
Proj. #: 46526

Roll: 42 Photo #18

Date: 06-03-03 Time: 10:50

Photographer: Leigh Peters

Description: Photo facing south showing Ryan Construction installing clear, flexible piping to connect the yard piping to the manifold.



Site: American Chemical Services, Inc.

Proj. #: 46526

Roll: 43 Photo #1

Date: 06-05-03 Time: 08:27

Photographer: Leigh Peters

Description: Photo facing south-southwest showing Ryan Construction drilling a hole in the OFCA ISVE system condensate knockout tank for level switch.





Site: American Chemical Services, Inc.

Proj. #: 46526

Roll: 43 Photo #2

Date: 06-05-03 Time: 08:44

Photographer: Leigh Peters

Description: Photo facing southeast showing Ryan Construction installing the liquid level transmitter in the OFCA ISVE system condensate knockout tank.

Site: American Chemical Services, Inc.

Proj. #: 46526

Roll: 43 Photo #3

Date: 06-05-03 Time: 08:55

Photographer: Leigh Peters

Description: Photo facing southeast showing Austgen assembling the OFCA ISVE system condensate knockout tank.



Site: American Chemical Services, Inc.

Proj. #: 46526

Roll: 43 Photo #4

Date: 06-05-03 Time: 08:59

Photographer: Leigh Peters

Description: Photo facing west showing Tim Kirkland of Austgen in respirator measuring the offset distance of the level transmitter in tank. PID in breathing zone = 0 ppm.



Site: American Chemical Services, Inc.

Proj. #: 46526

Roll: 43 Photo #5

Date: 06-05-03 Time: 11:30

Photographer: Leigh Peters

Description: Photo facing west showing Tim Kirkland of Austgen blowing out the yard piping connection to a ONCA SBPA ISVE system well.





Site: American Chemical Services, Inc.

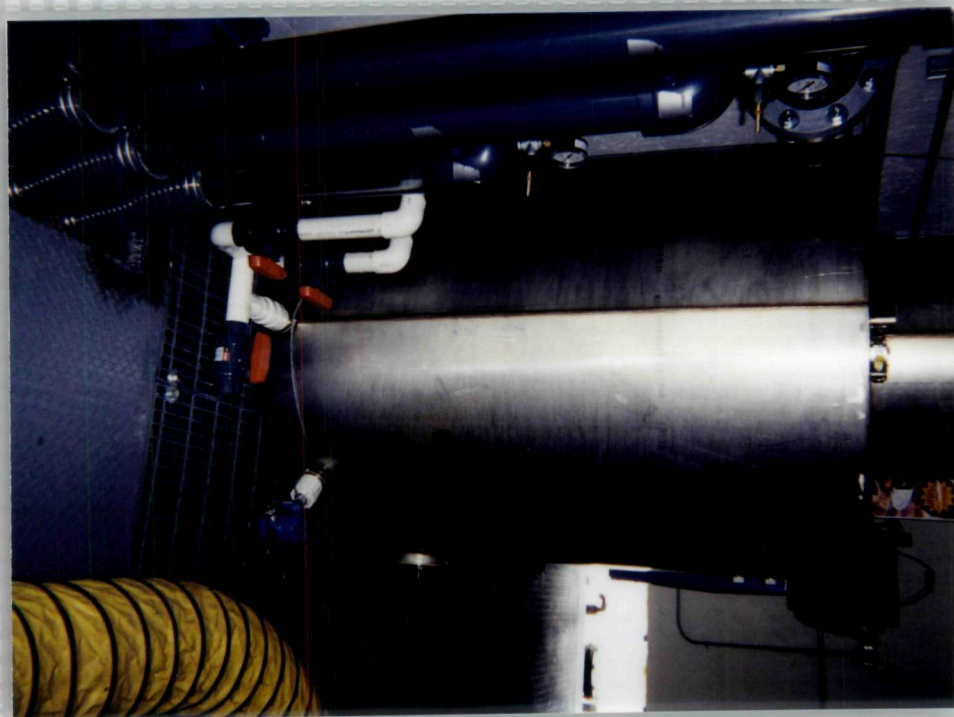
Proj. #: 46526

Roll: 43 Photo #6

Date: 06-05-03 Time: 11:55

Photographer: Leigh Peters

Description: Photo facing north showing Ryan Construction installing the flexible piping from the blower shed manifold to ONCA SBPA ISVE well SVE-53.



Site: American Chemical Services, Inc.

Proj. #: 46526

Roll: 43 Photo #7

Date: 06-05-03 Time: 13:30

Photographer: Leigh Peters

Description: Photo facing west showing the ONCA SBPA ISVE system condensate knockout tank and the secondary containment installed into the flooring.





Site: American Chemical Services, Inc.

Proj. #: 46526

Roll: 43 Photo #8

Date: 06-10-03 Time: 07:45

Photographer: Leigh Peters

Description: Photo facing east-southeast showing the extended frame for the west wall of the ONCA SBPA ISVE system blower shed building #1.



Site: American Chemical Services, Inc.

Proj. #: 46526

Roll: 43 Photo #9

Date: 06-10-03 Time: 07:57

Photographer: Leigh Peters

Description: Photo facing south-southeast showing the extension to the ONCA SBPA ISVE system blower shed building #1 installed to enclose the piping.





Site: American Chemical Services, Inc.

Proj. #: 46526

Roll: 43 Photo #10

Date: 06-10-03 Time: 08:05

Photographer: Leigh Peters

Description: Photo facing southwest showing the concrete pad installed at ONCA SBPA ISVE system air sparge point AS-1 and dual phase extraction well SVE-46.



Site: American Chemical Services, Inc.

Proj. #: 46526

Roll: 43 Photo #11

Date: 06-10-03 Time: 08:30

Photographer: Leigh Peters

Description: Photo facing southeast showing Fliteway completing the extension and framing to ONCA SBPA ISVE system blower shed building #1.





Site: American Chemical Services, Inc.

Proj. #: 46526

Roll: 43 Photo #12

Date: 06-10-03 Time: 10:00

Photographer: Leigh Peters

Description: Photo facing south showing Fliteway installing plywood onto the framing for ONCA SBPA ISVE system blower shed building #1.



Site: American Chemical Services, Inc.

Proj. #: 46526

Roll: 43 Photo #13

Date: 06-10-03 Time: 11:07

Photographer: Leigh Peters

Description: Photo facing west showing the interior of the extension to ONCA SBPA ISVE system blower shed building #1.





Site: American Chemical Services, Inc.

Proj. #: 46526

Roll: 43 Photo #14

Date: 06-10-03 Time: 11:15

Photographer: Leigh Peters

Description: Photo facing northeast showing Fliteway welding a skirt to the base of ONCA SBPA ISVE system blower shed building #1.



Site: American Chemical Services, Inc.

Proj. #: 46526

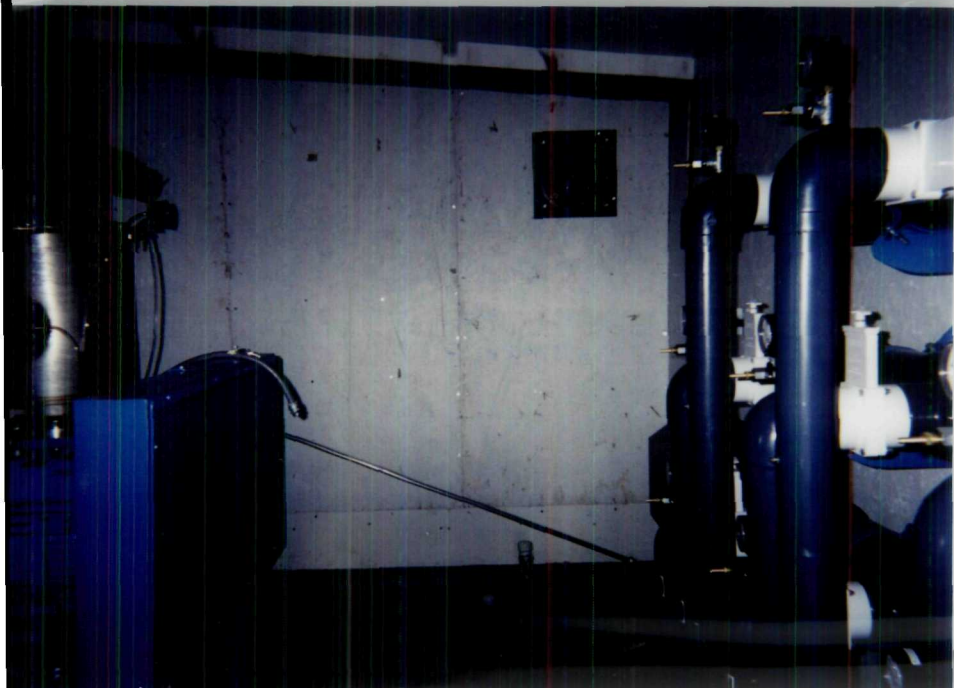
Roll: 43 Photo #15

Date: 06-16-03 Time: 08:00

Photographer: Leigh Peters

Description: Photo facing southwest showing the southwest extension to the ONCA SBPA ISVE system blower shed building #1.





Site: American Chemical Services, Inc.

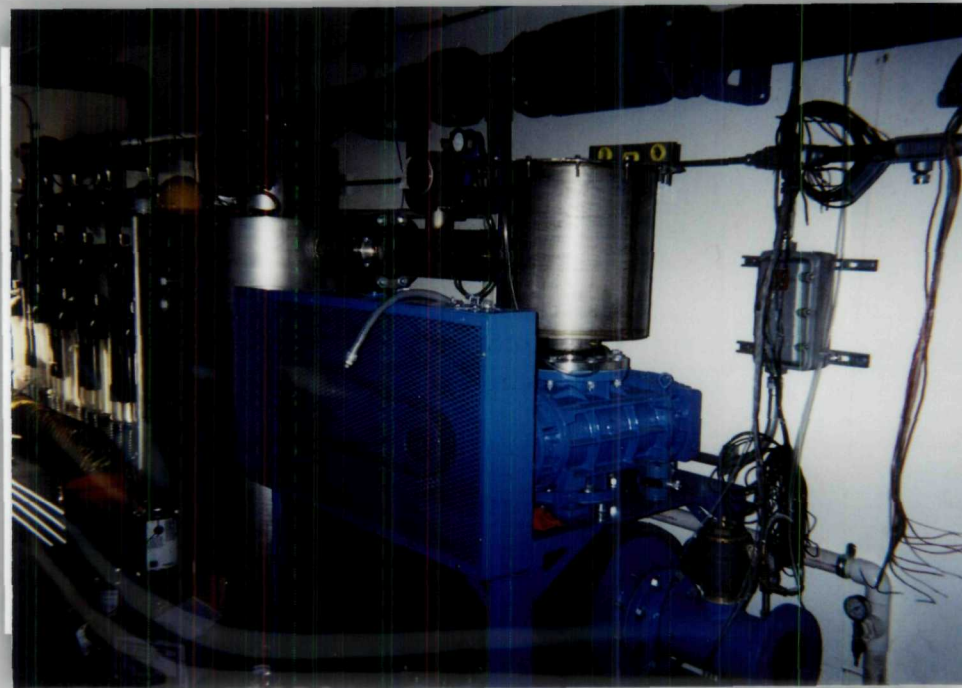
Proj. #: 46526

Roll: 43 Photo #16

Date: 06-16-03 Time: 08:02

Photographer: Leigh Peters

Description: Photo facing west showing the western wall extension installed in ONCA SBPA ISVE system blower shed building #1.



Site: American Chemical Services, Inc.

Proj. #: 46526

Roll: 43 Photo #17

Date: 06-16-03 Time: 08:04

Photographer: Leigh Peters

Description: Photo facing east-southeast showing the blower, silencer, and condensate knockout tank installed in ONCA SBPA ISVE system blower shed building #1.



Site: American Chemical Services, Inc.

Proj. #: 46526

Roll: 43 Photo #18

Date: 06-17-03 Time: 08:00

Photographer: Leigh Peters

Description: Photo facing west showing the code violations of the electrical boxes installed on the west wall of the ONCA SBPA ISVE system blower shed building #1.

Site: American Chemical Services, Inc.

Proj. #: 46526

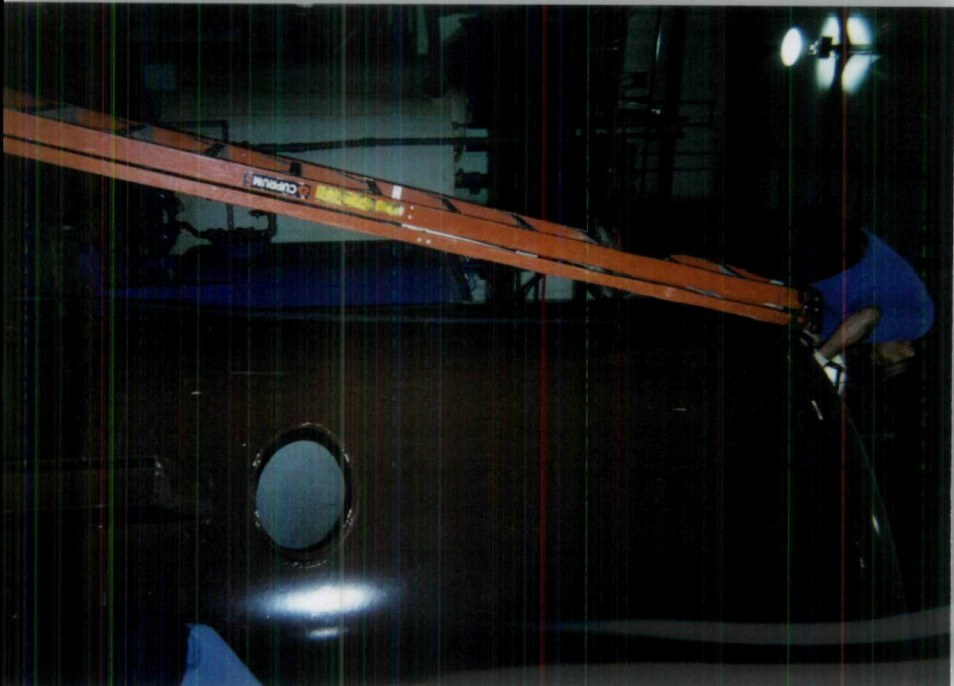
Roll: 43 Photo #19

Date: 06-17-03 Time: 08:30

Photographer: Leigh Peters

Description: Photo facing south showing Austgen adding water to the GAC vessel in order to fluidize the carbon for removal





Site: American Chemical Services, Inc.

Proj. #: 46526

Roll: 43 Photo #20

Date: 06-17-03 Time: 09:30

Photographer: Leigh Peters

Description: Photo facing south-southwest showing MWH rinsing out the GAC vessel. Note manhole access in side of vessel.



Site: American Chemical Services, Inc.

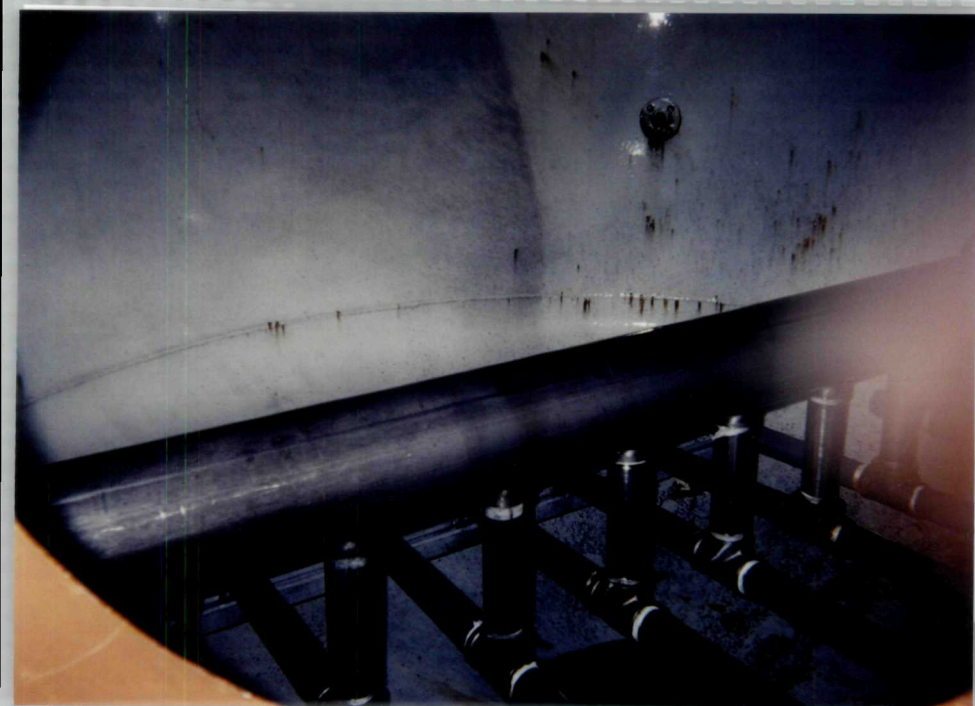
Proj. #: 46526

Roll: 43 Photo #21

Date: 06-17-03 Time: 09:35

Photographer: Leigh Peters

Description: Photo facing southwest showing Austgen shoveling excess GAC from vessel into pail for disposal.



Site: American Chemical Services, Inc.

Proj. #: 46526

Roll: 43 Photo #22

Date: 06-17-03 Time: 09:45

Photographer: Leigh Peters

Description: Photo facing southeast showing the existing distribution piping installed in the lag GAC vessel in the GWTP.



Site: American Chemical Services, Inc.

Proj. #: 46526

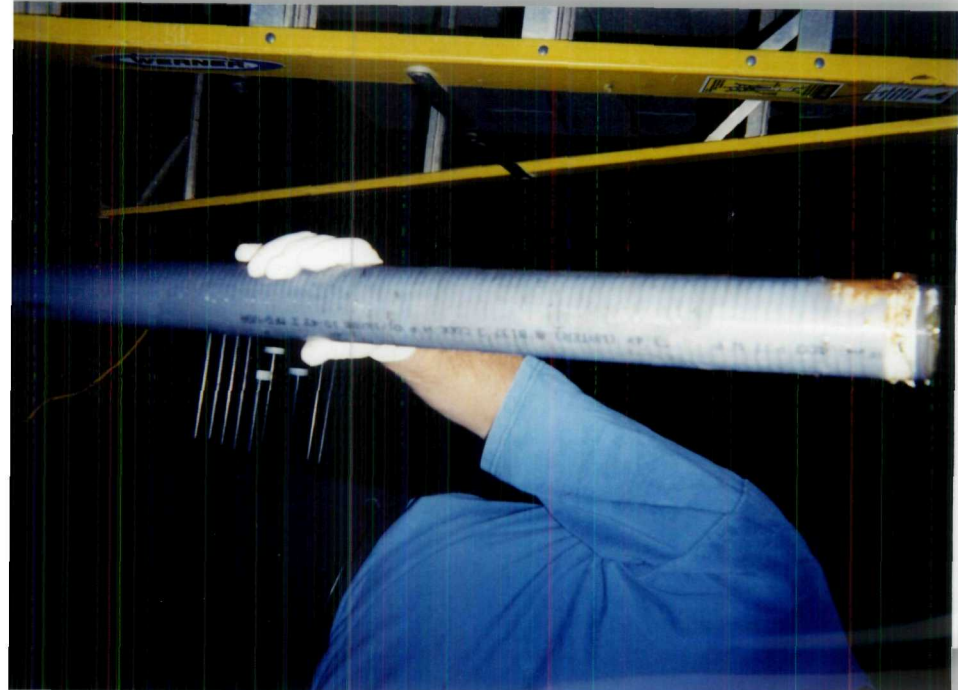
Roll: 43 Photo #23

Date: 06-17-03 Time: 10:55

Photographer: Leigh Peters

Description: Photo facing southwest showing the Carbonair personnel inside the lag GAC vessel. Note confined space entry permit posted next to the opening by MWH.





Site: American Chemical Services, Inc.

Proj. #: 46526

Roll: 43 Photo #24

Date: 06-17-03 Time: 11:06

Photographer: Leigh Peters

Description: Photo facing south showing a piece of the clogged, slotted distribution piping that was removed from the lag GAC vessel.

Site: American Chemical Services, Inc.

Proj. # 46526

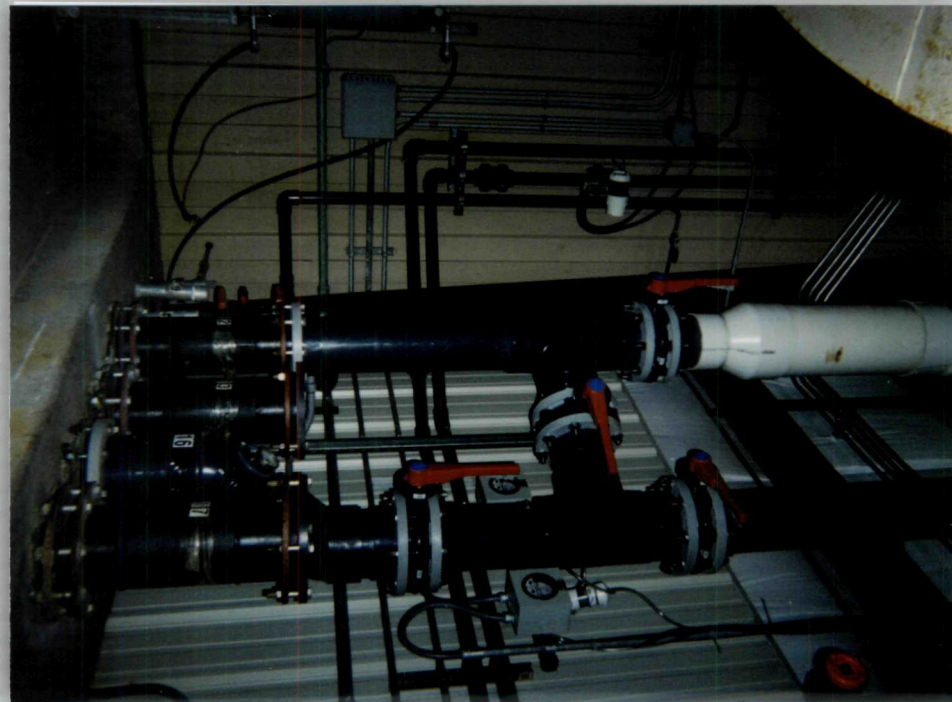
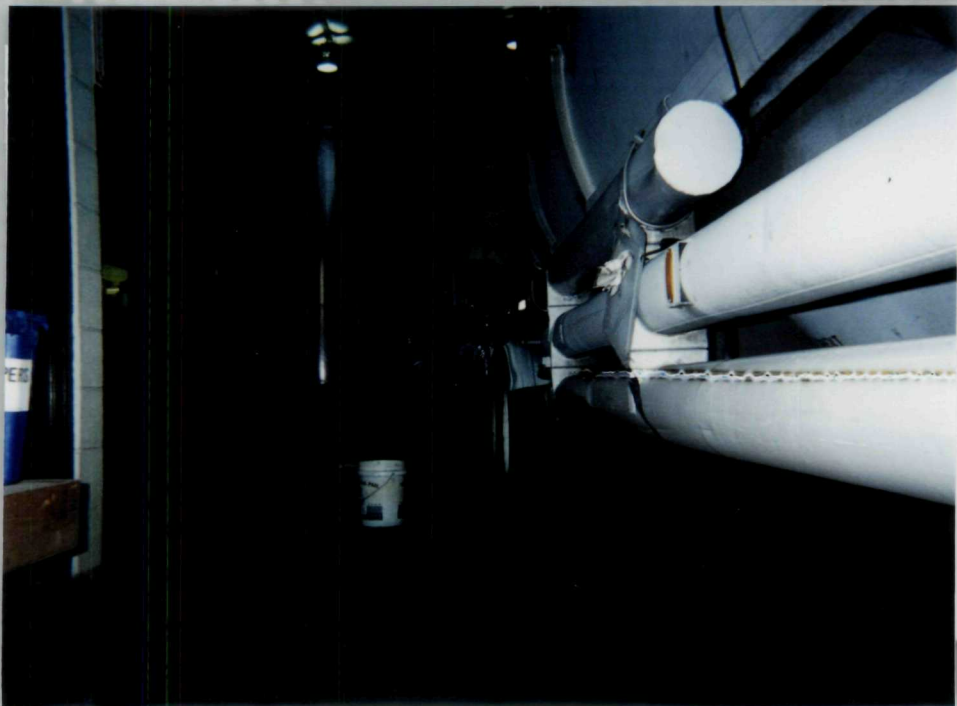
Roll: 43 Photo #25

Date: 06-17-03 Time: 11:26

Photographer: Leigh Peters

Description: Photo facing southwest showing Carbonair replacing the distribution piping inside the lag GAC vessel.





Site: American Chemical Services, Inc.

Proj. # 46526

Roll: 43 Photo #26

Date: 06-17-03 Time: 14:35

Photographer: Leigh Peters

Description: Photo facing south showing Austgen washing down the GAC in the lead GAC vessel while Autumn Industries dewateres the truck.

Site: American Chemical Services, Inc.

Proj. # 46526

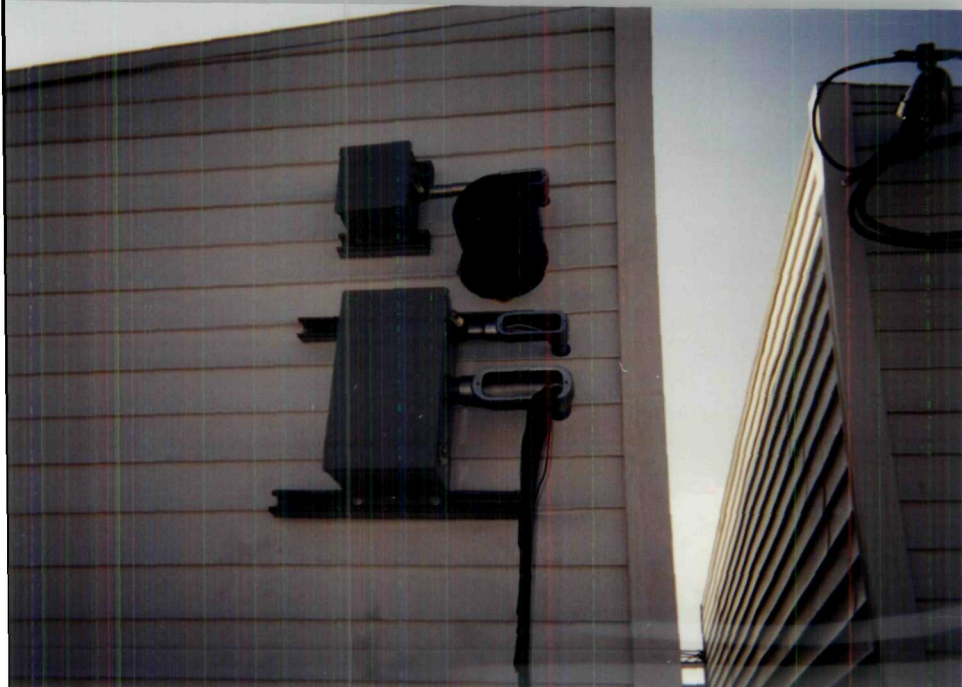
Roll: 43 Photo #27

Date: 06-17-03 Time: 14:45

Photographer: Leigh Peters

Description: Photo facing northeast showing the 12-inch-diameter piping installed from the manifold in the GWTP for the influent to Thermal Oxidizer Unit 2.





Site: American Chemical Services, Inc.

Proj. #: 46526

Roll: 44 Photo #1

Date: 06-19-03 Time: 07:50

Photographer: Leigh Peters

Description: Photo facing east showing the new electrical boxes and conduit on the exterior western wall of ONCA SBPA ISVE system blower shed building #1.

Site: American Chemical Services, Inc.

Proj. #: 46526

Roll: 44 Photo #2

Date: 06-19-03 Time: 08:10

Photographer: Leigh Peters

Description: Photo facing west showing the ponded water at the catch basin located on the southern portion of the ONCA SBPA, immediately west of the access road.





Site: American Chemical Services, Inc.

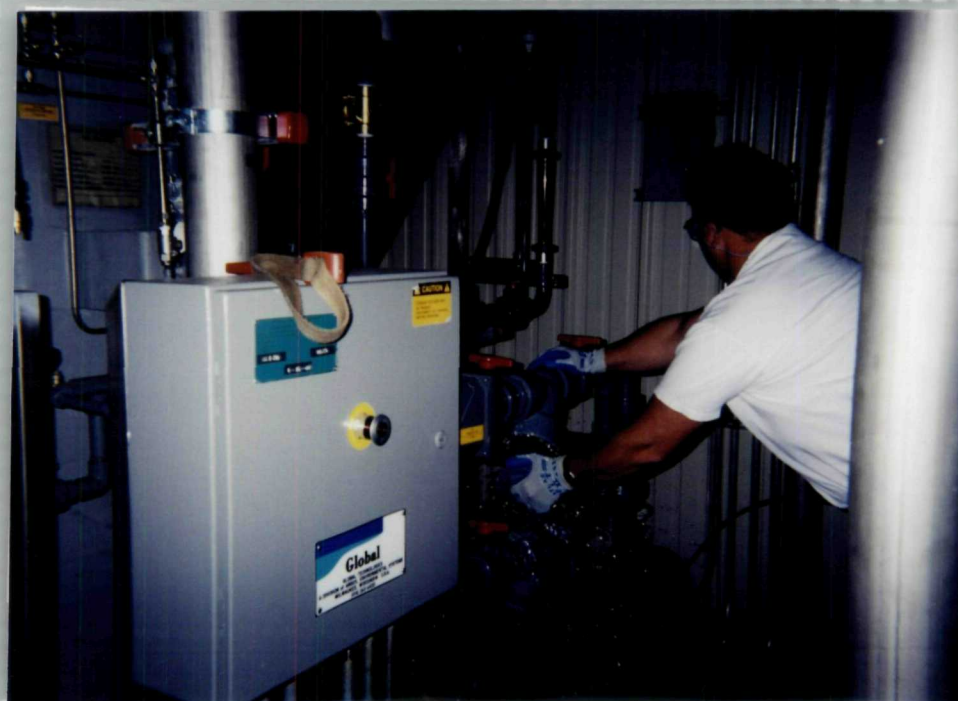
Proj. #: 46526

Roll: 44 Photo #3

Date: 06-19-03 Time: 08:15

Photographer: Leigh Peters

Description: Photo facing southwest showing the ponded water on the southeast corner of the ONCA SBPA at an ACS building.



Site: American Chemical Services, Inc.

Proj. #: 46526

Roll: 44 Photo #4

Date: 06-19-03 Time: 09:50

Photographer: Leigh Peters

Description: Photo facing southeast showing MWH removing clogged screens from Thermal Oxidizer Unit 2.





Site: American Chemical Services, Inc.

Proj. #: 46526

Roll: 44 Photo #5

Date: 06-19-03 Time: 09:52

Photographer: Leigh Peters

Description: Photo facing southeast showing screen from Thermal Oxidizer Unit 2 and material that has clogged the screens.

Site: American Chemical Services, Inc.

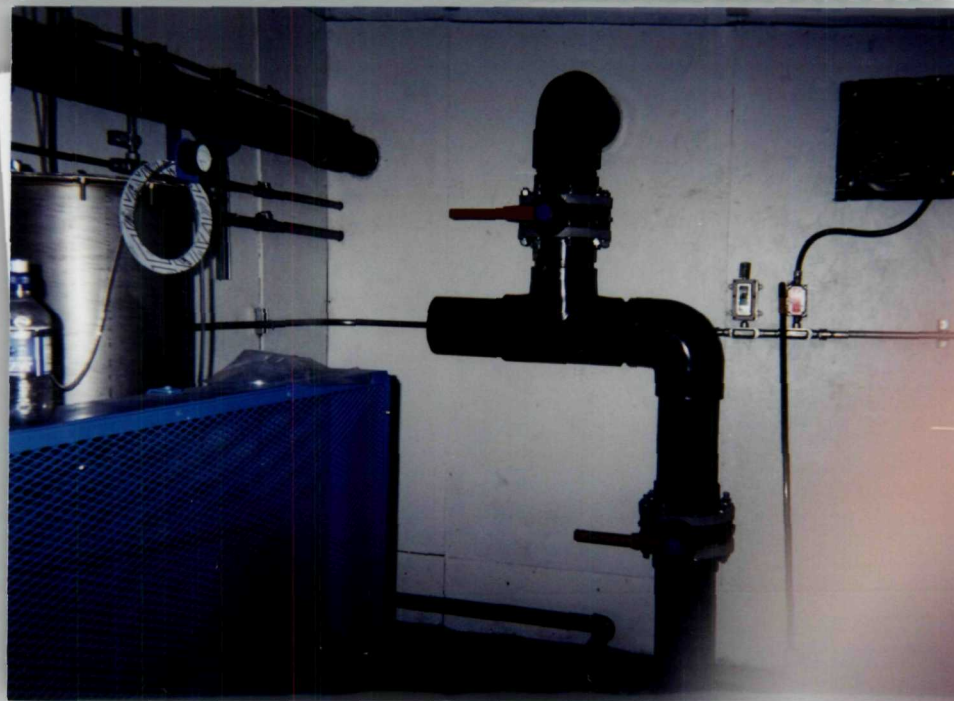
Proj. #: 46526

Roll: 44 Photo #6

Date: 06-26-03 Time: 11:00

Photographer: Leigh Peters

Description: Photo facing northwest showing the connected air sparge and air supply lines to the DPE wells in the ONCA SBPA ISVE system blower shed building #2.



Site: American Chemical Services, Inc.

Proj. #: 46526

Roll: 44 Photo #7

Date: 06-26-03 Time: 11:03

Photographer: Leigh Peters

Description: Photo facing west showing Austgen wiring the control panels in ONCA SBPA ISVE system blower shed building #2.

Site: American Chemical Services, Inc.

Proj. #: 46526

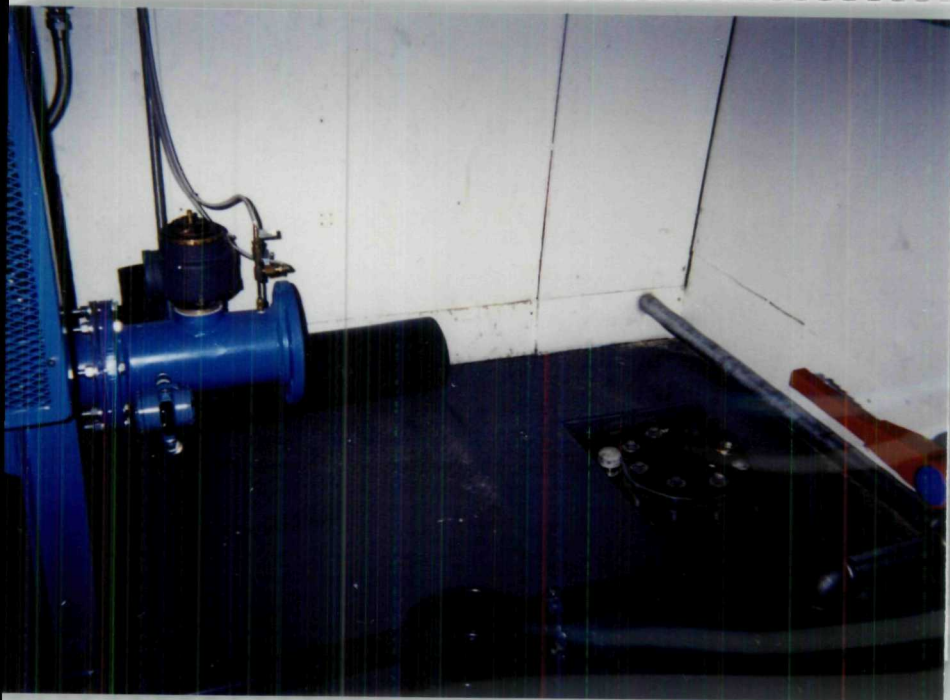
Roll: 44 Photo #8

Date: 06-26-03 Time: 11:05

Photographer: Leigh Peters

Description: Photo facing west showing the 8-inch-diameter vapor conveyance piping connected within the ONCA SBPA ISVE blower shed building #1.





Site: American Chemical Services, Inc.

Proj. #: 46526

Roll: 44 Photo #9

Date: 06-26-03 Time: 11:07

Photographer: Leigh Peters

Description: Photo facing southwest showing the blower effluent and steel air supply line from the GWTP to supply the DPE pneumatic pumps from blower shed building #2.



Site: American Chemical Services, Inc.  
Proj. #: 46526

Roll: 44 Photo #10

Date: 06-26-03 Time: 11:10

Photographer: Leigh Peters

Description: Photo facing east showing the exterior west wall of ONCA SBPA blower shed building #1; air intake on right (white) and exhaust from blower on left (grey).